

Transmittal Page

Product	Title	Part Number
5614, 5113, 5114	Service Manual	701P09830
Status	Date	
REISSUE		April 1997
Replaces 701P05010 dated 12/95		

Please use this change package to update your service manual. Replace the pages listed below:

<u>Remove and Destroy</u>	<u>Insert</u>
All	All

Change Highlights:

Section 2:

The diagnostic effectiveness of Section 2 is enhanced by the extensive revision of the input power and DC voltage RAP's. This section also benefits from the addition of pertinent feedback received from the field.

Section 3:

The Copy Defect Tables and Image Defect Samples are consolidated into separate tables. Image Quality RAP's are revised to reflect the availability of new technical information as well as additional field input relative to problem resolution.

Section 4:

The removal procedure for the Lens Drive Motor is revised to recognize a production hardware change. The registration adjustment procedure is revised to comprehend new technical information and incorporate technical comments from the field.

Section 5:

This section is revised to include sparing changes and part number revisions.

Section 6:

This section includes new information, product specs, and additions to supplemental tools and supplies lists.

Section 7:

Some BSD's are revised to increase circuit detail, clarify functionality, and add technical accuracy.

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***Xerox 5614, 5113, 5114 Copier
Service Manual (50 / 60) Hz***

701P09830
April 1997

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Prepared by:
Multinational Customer and Service Education
Xerox Corporation, Rochester, New York 14644

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FCC COMPLIANCE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communication. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense. If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the Federal Communications Commission helpful:

How to Identify and Resolve Radio-TV Interference Problems

Stock number: 004-000-00345-4

This booklet is available from the U.S.
Government Printing Office, Washington,
D.C. 20402

Revision Control List

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INTRODUCTION

ABOUT THIS MANUAL

Documentation Design and Purpose

The 5614/5113/5114 Service Manual is part of a multinational documentation system that has been developed by the Xerox Corporation, Multinational Customer and Service Education (MC&SE), 780 Salt Road, Webster, New York, 14580.

This service manual contains diagnostic, repair, and maintenance information, which is designed to assist the Service Representative in the isolation and repair of faults as well as maintenance of the 5614/5113/5114 copier.

This manual assumes that the user is familiar with the electrical and mechanical standards that are commonly used throughout industry, as well as certain Xerox design and documentation conventions. This manual also assumes that the user has successfully completed any required training and is familiar with the use of any special tools that are required in the servicing of this product.

Applicability

This manual contains information that applies to units built for United States Operations (USO), Americas Operations (AO), Xerox Canada Limited (XCL), and Rank Xerox (RX). Normally, the diagnostic, repair, and adjustment procedures found in this manual apply equally to all 50 Hz and 60 Hz machine versions. Some procedures, however, may be identified as being applicable to a specific version or machine configuration.

Limitations

This service manual does not support specific electrical, mechanical, or operational considerations of any accessory device or machine modification not authorized by Xerox Corporation for this product.

Service Manual Revisions

This service manual may be subject to reissue or partial revision in order to reflect any changes in electrical or mechanical hardware, as well as any possible additions or corrections necessary to ensure the technical accuracy of the manual.

Temporary Service Information (Yellow Pages)

When appropriate, temporary service information in the form of yellow pages will be distributed and should be incorporated into this service manual. Temporary Service Information may include bulletin information, Tag and Kit information, page revisions, or current top problems relative to the repair and maintenance of the machine.

Field Service Bulletins

Field service information specifically applicable to the machine may occasionally be issued in the form of bulletins. Because bulletins contain important information, they should always be retained within this service manual for quick reference.

Publication Comment Sheet

A Publication Comment Sheet (PCS) is provided at the end of this service manual. The PCS form is used to communicate pertinent information to Multination Customer & Service Education regarding the effectiveness and technical accuracy of this manual.

INTRODUCTION

ORGANIZATION

This Service Manual is divided into eight sections. In addition to the Introduction, the following sections are contained within this manual:

- Section 1 - Service Call Procedures
- Section 2 - Status Indicator RAPs
- Section 3 - ImageQuality RAPs
- Section 4 - Repair/Adjustment Procedures
- Section 5 - Parts Lists
- Section 6 - General Procedures/Information
- Section 7 - Wiring Data
- Section 8 - Accessories

A detailed description of the information contained within each service manual section is included in this section.

Section 1: Service Call Procedures

This section contains the following information:

- Call Flow Diagram
The Call Flow Diagram is a map of the procedures to follow for each service call.
- Initial Action
The Initial Actions identify how to collect the necessary information required, and how to verify, to classify, and to proceed with the service call.
- Maintenance Activities
The Maintenance Activities lists the items that have to be serviced based on the type of call to be performed, either Normal Call or Call Back.

Section 2: Status Indicator RAPs

This section contains the Repair Analysis Procedures (RAPs) that are necessary to repair machine faults other than image quality defects. When using a RAP, stop the repairs when the fault is fixed. Do not perform the remaining steps.

Section 3: Image Quality RAPs

This section contains a listing of image quality defects and samples to assist in classifying the machine problem. When the defect has been classified, a checklist is then used to repair the cause of the defect. The checklists are arranged in the sequence of most probable to least probable cause with the corresponding corrective action for each.

Section 4: Repairs/aAdjustments Procedures

This section contains the Repairs and Adjustments for the copier.

Section 5. Parts List

This section contains the detailed parts lists for the copier.

Section 6: General Procedures/ Information

This section contains the Diagnostic Procedures, Product Specifications, Supplemental Tools and Supplies, Installation and Removal procedures, and other information.

Section 7: Wiring Data

This section contains the Plug/Jack Locational Drawings, Electrical Component Wiring Connections Drawings, and a set of Component Drawings.

Section 8: Accessories/ Options

This section is not currently applicable to 5614/5113/5114.

INTRODUCTION

HOW TO USE THIS MANUAL

Always begin with the Service Call Procedures, Section 1. Perform Initial Actions to identify and to classify the problem.

Then proceed to one of the following sections of the manual to correct the problem.

Section 2 contains the Status Indicator RAPs. Use these RAPs if the copier is not operational, such as when a Status Code is displayed or there is an incorrect indication, etc.

Section 3 is used to troubleshoot Image Quality problems. If you are not sure of the type of image quality defect that is occurring, use the contents page in Section 3 to find a defect that best represents the type of defect that is on the copy.

When using Section 2 or Section 3, you may be directed to Section 4 to perform repair or adjustment procedures, or to Section 5, Parts List.

Next, perform the Normal Call procedures.

After performing Normal Call or Call Back, perform Final Actions to ensure that the copier meets the copy specifications.

Multinational Configuration Differences

This manual contains information that applies to **USCO** (USA), **AO** (Latin America), **XCL** (Canada), and **RX** (Rank Xerox and Xerox Engineering Systems Europe). USCO references usually apply to XCL and AO. If a USA, AO, XCL or RX copier configuration is different, the specific USO, XCL, AO or RX information will be shown by itself.

Phrases and Terms

Dry Ink means the same as Toner and Tag means the same as Mod.

Repair Analysis Procedures (RAPs)

A RAP is a series of steps that is designed to lead you to the cause of a problem. In each step, you will perform an action or observe an occurrence. At each step, a statement is made that has a Yes (Y) or No (N) answer.

If the answer is No, perform the action following the No. If the answer is Yes, proceed to the next step.

When several items are listed, perform them in the sequence that is listed.

Proceed through the steps only until the problem is solved. There is no need to continue with the RAP after the problem is corrected.

Repairs / Adjustments Procedures

The repair procedures provide the detailed steps for removing and replacing components. The adjustment procedures provide the detailed steps for checking and adjusting components. Some copiers have been modified by various design changes. Each change or modification is labeled with a Tag/MOD (modification) number. The Tag/MOD numbers are identified in the Change Tag/MOD Index in Section 6 of this Service Manual.

When a modification affects how a particular procedure is performed, the procedure or steps are identified with either a **W/ Tag/MOD** or a **W/O Tag/MOD** statement. Each procedure or step that is affected by a modification is identified with the statement, **W/ Tag/MOD** followed by the modification number. The **W/** in the statement indicates that this step must be performed on copiers that are assembled with that specific modification.

When the procedure or steps are not affected by a particular modification, they are identified with the statement, **W/O Tag/MOD**, followed by the modification number. The **W/O** in the statement indicates that this step must be performed on copiers that are assembled without that specific modification.

REFERENCE SYMBOLOGY

The following symbols are used in this document:



Note

This symbol is used to refer to notes, usually on the same page.



Voltage Source

This is an indication of the source voltage that is used for operation of a component. This voltage is distributed in the PWB.



Status Code

The status code is represented by a box in the control logic section of the circuit diagram. This example is the code for the Roll 1 position sensor.



Flags

This symbol is used on the circuit diagrams and is pointing to a wirenet that has to be examined for a short circuit to frame or for an open circuit.

[4-3]

Component Control

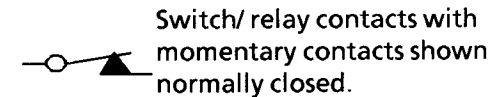
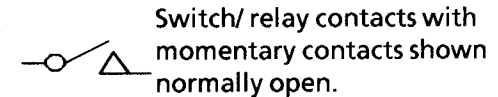
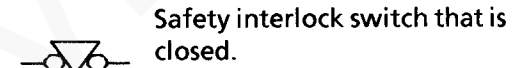
The code [4-3] is the output diagnostic test for the copier drum/developer motor.

PL 1.1

Parts List

This is the reference to the parts list exploded drawing where the spared component is found.

Switches and Relay Contacts



WARNING

A warning is used to alert the personnel to an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in injury or loss of life.

CAUTION

A caution is used to alert the personnel to an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in damage to, or destruction of, equipment.



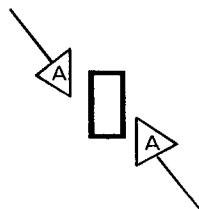
CAUTION

This symbol is used when components in the copier are susceptible to damage from electrostatic discharge. Observe ESD procedures to avoid component damage



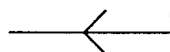
Signal Flow

This symbol is used on circuit diagrams to indicate an interrupted signal in the horizontal direction.

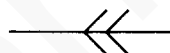


Signal Flow

This symbol is used on circuit diagrams to indicate an interrupted signal in the vertical direction.



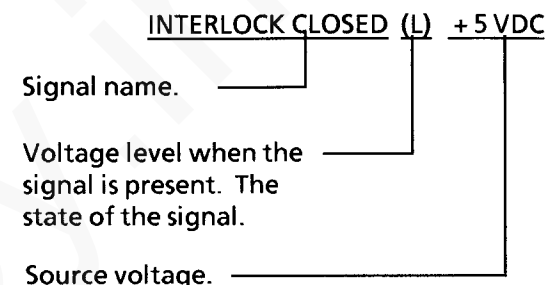
This symbol is used on circuit diagrams to indicate a recirculating signal.



This symbol is used on circuit diagrams to indicate a feedback signal.

Signal Name

The signal line is given a name that indicates the condition of the signal when the signal is present.



DC Voltage Specifications

Voltage	Specification	Test Point Main PWB
+ 5 VDC	4.75 TO 5.25 VDC	JP 1
+ 24 VDC	22 TO 26 VDC	JP 3
+ 32 VDC	28 TO 39 VDC	JP 47
DC COM	0.0 TO + 0.8 VDC	JP 2
(L) (H)	See note below	
		SDF PWB
+ 30 VDC	28 TO 30 VDC	F301

NOTE:

A change of 0.5 VDC indicates a change of signal level from Hi to Low or from Low to Hi. This is a minimum change. A change of signal level of 4.5VDC may also be measured on some circuits. For example, 4.5 VDC is the (L) if 5 VDC is the (H). Or, 4.5 VDC is the (H) if 4 VDC is the (L). Another example is 1.5 VDC is the (H) if 0.5 VDC is the (L). When checking the voltage while actuating a component, a change in voltage level is what to check for, not the actual voltage, unless a specific voltage is identified. A change of 0.5 VDC is a good voltage level change on some circuits.

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Introduction

Use the Service Call Procedures as a maintenance guide when performing any service on the 5614, 5113/5114 Copier. The procedure has been designed to be used with the 5614, 5113/5114 Service Manual and is the entry level for all service calls.

- Call Flow Diagram

This diagram identifies and classifies the copier problem and refers you to the appropriate RAP in order to repair the problem. When the problems have been repaired, perform the Final Actions.

- Status Code/Other Fault Listing

This section contains a listing of all the status codes with a brief description of the code.

- Periodic Maintenance

This section contains a schedule of periodic maintenance to be performed when the copier copy count has reached significant checkpoints.

- Maintenance Procedures

This section contains a list of the copier subsystem components to be cleaned and the cleaning materials to be used, when that subsystem is accessed during a repair.

- Initial Actions

This section contains the detail steps to perform when diagnosing the copier faults.

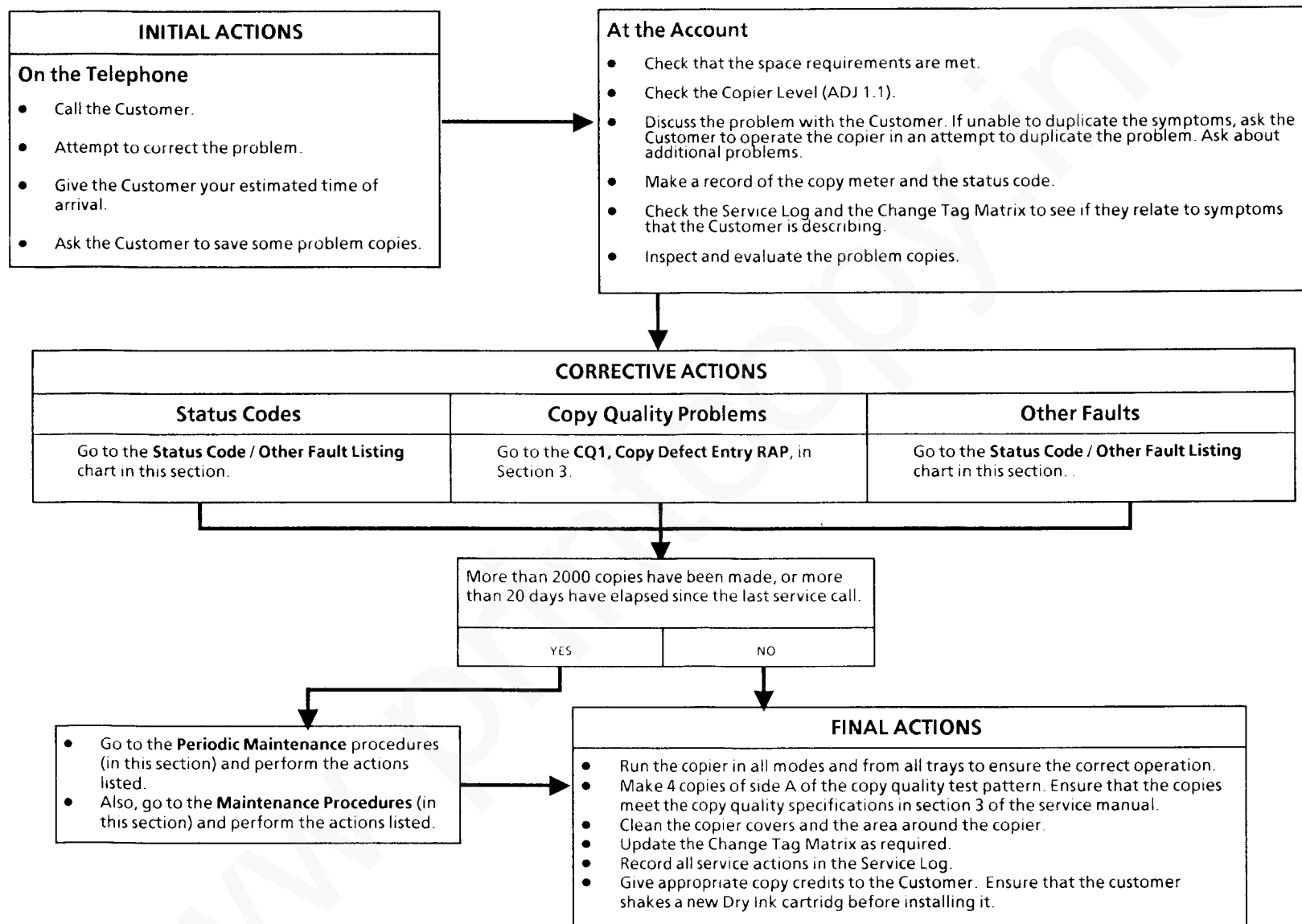
- Corrective Actions

This section contains the detail steps to follow when repairing the faults found in the copier.

- Final Action

This procedure should be completed at the end of every service call to ensure that the copy paper and the document are being transported properly, and to ensure that the copy quality is within specification.

Call Flow Diagram



STATUS CODE / OTHER FAULT LISTING

DESCRIPTION	CORRECTIVE ACTION
A1, Document jam: refeed one document	A1/A2 RAP
A2, Document jam: refeed more than one document	A1/A2 RAP
C1, Tray 1 misfeed	C1 RAP
C2, Tray 2 misfeed, Transport Cover open, Bypass Tray disconnected	C2 RAP
C3, BypassTray misfeed	C3 RAP
EE – EL, Auto developer adjustment-overtuned	EE – EL RAP
EE – EU, Auto developer adjustment-undertuned	EE – EU RAP
E1, Paper feed sensor jam	E1 RAP
E3, Exit Sensor post Fuser paper path jam	E3 RAP
J0, Auto developer setup in progress (initial install only)	Allow 3 minutes for the developer setup
J1, Low Dry Ink concentration ratio	Add Dry Ink / J1 RAP
J3, CRU not seated or inserted properly	J3 RAP
J7, Replace copy cartridge (CRU copies remaining = 0)	Install a new Copy Cartridge
J8, Incorrect Copy Cartridge, or power switched off and on after a J7 was declared.	Install a new Copy Cartridge
L6, Key counter not inserted or foreign accessory is inoperative.	L6 RAP

(Continued on the next page)

STATUS CODE / OTHER FAULT LISTING (continued)

DESCRIPTION	CORRECTIVE ACTION
U1, Main Drive Motor failure	U1 RAP
U2, Full Rate Carriage scan problem	U2 RAP
U3, Lens Position Problem	U3 RAP
U4, 01, Open Heat Roll Thermistor	U4-01 RAP
U4 – 02, Fuser Roll Overtemperature	U4-02 RAP
U4 – 03, Fuser Roll Undertemperature	U4-03 RAP
U5 – Tray 1 Lift Motor failure (500 sheet tary)	U5 RAP
U6, Main PWB communications failure	U6 RAP
U7, SDF Document Glass overheat	U7 RAP
U8, Customer supplied power or exposure problem	U8 RAP
U9, Auto developer setup - No Developer	U9 RAP
Copy Counter (mechanical) problem	OF 3.4 Copy Counter RAP
Auditron / Coin Op / Foreign Interface problem	L6 RAP
Cooling Fans inoperative	OF 1.6, Cooling Fan(s) RAP
Control Panel problem or no Control Panel lights	OF 2.1, Copier Display / Dead Copier RAP
Control Panel buttons inoperative	OF 2.1, Copier Display / Dead Copier RAP

(Continued on the next page)

STATUS CODE / OTHER FAULT LISTING (continued)

DESCRIPTION	CORRECTIVE ACTION
Copies per minute too slow	OF 3.1, Copies per Minute / SDF Interlock RAP
Copier dead cycles too long before making a copy	OF 3.2, Copier Dead Cycles / FCOT RAP
Copier does not slow down when the SDF is raised while copying	OF 3.1, Copies per Minute / SDF Interlock RAP
SDF document jam clearance reset requires power off/on	OF 3.1, Copies per Minute / SDF Interlock RAP
SDF is inoperative	OF 5.1, SDF RAP
SDF Document Present Lamp problem	OF 5.1, SDF RAP
SDF documents are damaged	OF 5.3, Document Damage RAP
Exposure Lamp problem	OF 6.2, Exposure Lamp RAP
Multifeeds in the Copier	OF 7.3, Multifeed RAP
Z Folds	OF 8.1, Paper Drives RAP
500 sheet Tray 1 problems	U5 RAP
250 sheet Tray 1 problems	OF 7.1, Tray 1 Paper Indicator RAP
Tray 2 problems	OF 7.2, Tray 2 Paper Indicator RAP
Tray 2 cannot be selected	OF 7.2, Tray 2 Paper Indicator RAP
Noise is excessive or unusual	OF 16.1, Noise / Odor RAP
Odor is excessive or unusual	OF 16.1, Noise / Odor RAP
Intermittent problems	General Service Notes in Section 6

Periodic Maintenance

These activities are to be performed if 2K copies or 20 days have elapsed since the last service call, unless indicated otherwise.

Procedure

In this section, the periodic maintenance and cleaning activities to be performed are described.

1. **On Every Call**, perform the following:

- a. Clean the Transfer Corotron and Shield with a brush.
- b. Remove and clean the Developer Module.
- c. Clean both sides of the Document Glass and the Lens. Clean the white reflective strip that is located adjacent to the Document Glass, under the frame that supports the Registration Guide.

Copiers with an SDF: Clean the SDF Document Glass.

Use the following materials:

USO: Lens and-Mirror Cleaner (43H12) on a Lint-Free Cloth (600S4372).

RX: Lens and Mirror Cleaner (8R90178) on a Lint-Free Cloth (600S4372).

- d. Clean the Scan Rails with a dry cloth. Apply thin film of grease to the Scan Rails.

- e. Remove any dry ink or other contaminants from the interior of the copier (including the Discharge Lamp and the Edge Erase Lamp, and Transport Belts).
 - f. Clean the Registration Idler Roll and the Registration Roll with Film Remover.
 - g. Clean the Tray 1, Tray 2, and the Bypass Tray Feed Rolls and Retard Rolls with Film Remover.
 - h. **Copiers with an SDF:** Clean the SDF Feed Roll and Retard Rolls with Film Remover.
2. **Every 40K copies:** Replace the Fuser Cleaning Roller (PL6.2). Clean the Fuser Roll, the Pressure Roll, Exit Roller, Fuser Roll Stripper Fingers, Pressure Roll Stripper Fingers, and the Fuser Cleaning Blade (REP 10.9) with Film Remover.

Maintenance Procedures

Procedure

Clean or lubricate the following components as necessary in order to maintain proper copier operation. In addition, always clean any component that appears contaminated with dirt, paper dust, or dry ink whenever the component is made accessible during the repair of the copier.

ACTIVITY	USCO MATERIALS	RX MATERIALS
OPTICS Clean both sides of the Document Glass, the Mirrors 1 through 6, and the Lens. Clean the Exposure Lamp Reflector. Clean/lubricate the Scan Rails. Clean the Exposure Lamp and the Reflective Strip on the underside of the Registration Strip.	 Lens and Mirror Cleaner (43H12), Lint-Free Cloth (600S4372), Antistatic Fluid 8R90273 Lint-Free Cloth (600S4372) Lint-Free Cloth (600S4372) Grease (70P53) Film Remover (43P45), Lint-Free Cloth (600S4372)	 Lens and Mirror Cleaner (8R90178), Lint-Free Cloth (600S4372) Lint-Free Cloth (600S4372) Lint-Free Cloth (600S4372) Grease (600T90429) General Cleaning Solvent (8R90176), Lint-Free Cloth (600S4372)
PAPER FEED AND REGISTRATION Clean the Feed Rolls. Clean the Registration Idler Roll and the Registration Roll. Clean the Retard Rolls.	 Film Remover (43P45), Lint-Free Cloth (600S4372) Film Remover (43P45), Lint-Free Cloth (600S4372) Film Remover (43P45), Lint-Free Cloth (600S4372)	 General Cleaning Solvent (8R90176), Lint-Free Cloth (600S4372) General Cleaning Solvent (8R90176), Lint-Free Cloth (600S4372) General Cleaning Solvent (8R90176), Lint-Free Cloth (600S4372)

(Continued on the next page)

Maintenance Procedures (continued)

ACTIVITY	USCO MATERIALS	RX MATERIALS
XEROGRAPHICS		
Clean the Transfer / Detack Corotron with a soft brush to remove Dry Ink and Film Remover / General Cleaning Solvent on a Lint-Free Cloth to clean the wire	Soft brush Film Remover (43P45)	Soft brush General Cleaning Solvent (8R90176)
Clean the Discharge / Edge Erase Lamp	Lint-Free Cloth (600S4372)	Lint-Free Cloth (600S4372)
COPY TRANSPORTATION AND FUSING		
Clean the Pressure Roll and the Pressure Roll Stripper Fingers	Film Remover (43P45) and a Heavy-Duty Towel (35P3191)	General Cleaning Solvent (8R90176) and a Cleaning Cloth (8R90019)
Clean the Fuser Heat Roll, the Thermistor, the Fuser Roll Cleaning Blade, and the Fuser Heat Roll Stripper Fingers	Film Remover (43P45) and a Heavy-Duty Towel (35P3191)	General Cleaning Solvent (8R90176) and a Cleaning Cloth (8R90019)
Clean the Exit Rollers, the Transport Belts, and the Exit Pinch Roller	Film Remover (43P45) and a Heavy-Duty Towel (35P3191)	General Cleaning Solvent (8R90176) and a Cleaning Cloth (8R90019)
SET DOCUMENT FEEDER (SDF)		
Clean the Nudger Rolls, the Takeaway Rolls, the Takeaway Pinch Rolls, and the Exit Rolls	Film Remover (43P45) and a Lint-Free Cloth (600S4372)	General Cleaning Solvent (8R90176) and a Lint-Free Cloth (600S4372)
Clean the Document Glass Cover Pad (foam)	Film Remover (43P45) and a Lint-Free Cloth (600S4372)	General Cleaning Solvent (8R90176) and a Lint-Free Cloth (600S4372)
COVERS		
Clean the covers as necessary	Formula A (43P48) and a Heavy-Duty Towel (35P3191)	All Purpose Cleaner (8R90175) and a Cleaning Cloth (8R90019)

Initial Actions

On the Telephone

1. Call the Customer and attempt to correct the problem over the telephone.
2. If the problem cannot be resolved over the telephone, give the Customer your estimated time of arrival.
3. Ask the Customer to save copies of problems being experienced while using the copier.

At the Account

1. Check that the space requirements for the copier are met.
2. Check the Copier Level (ADJ 1.1).
3. Ask the operator or Customer to describe the problem. If possible, ask the Customer to demonstrate the problem. Also ask about any additional problems being encountered with the copier.
4. Make a record of the copy meter and the Status Code.
5. Check the copier service log history and the tag matrix to see if they relate to the problem.
6. Inspect the sample copies provided by the Customer.
7. If a new copy cartridge has been installed by the Customer, and the problem was not corrected, remove the new copy cartridge. Reinstall the old copy cartridge, and then run 10 copies.
8. Switch off the power and then switch on the power.
9. Load 8.5 x 11 inch (A4) paper (SEF) into Tray 1. Select a quantity of 5 copies.

10. Load document(s).
 - a. **SDF Only:** Load two 8.5 x 11 inch (A4) documents (SEF) into the SDF.
 - b. **Without SDF:** Place side A of the Standard Test Pattern on the Document Glass.
11. Press the **Start** button.
12. After the copy job is complete, load 8.5 x 14 inch (B4) paper (SEF) into Tray 2, if available.
13. Select the Tray 2. Select a quantity of 2 copies.
14. **SDF Only:** Using the copies from the first run, put 10 documents (SEF) in the SDF.
15. Press the **Start** button.
16. After the copy job is complete, load 8.5 x 11 inch (A4) paper (SEF) into the Bypass Tray.
17. Select the Bypass Tray. Select a quantity of 2 copies.
18. **SDF Only:** Put 10 documents (SEF) in the SDF.
19. Press the **Start** button.
20. Proceed to **Corrective Actions** in order to troubleshoot the problems that were found during the Initial Actions.

Corrective Actions

1. If a status code is displayed on the control console (you may need to press the 0 button in order to display a secondary status code) go to the **Status Code / Other Fault Listing** chart in this section.
2. If the call is for a copy quality defect, go to the **CQ1, Copy Defect Entry RAP**, in Section 3.
3. For all other faults, go to the **Status Code / Other Fault Listing** chart in this section.
4. If no problems are found, troubleshoot the problems identified by the Customer.
5. If more than 2000 copies have been made or if 20 days have elapsed since the last service call, go to the **Periodic Maintenance** procedures (in this section) and to the **Maintenance Procedures** (in this section) and perform the actions listed after making the repairs. Then, go to the **Final Actions**.
6. If less than 2000 copies have been made, or if 20 days have not elapsed since the last service call, go directly to the **Final Actions** to complete the call.

Final Actions

Procedure

In this section, you will make sure that the copier is feeding paper properly, making copies free of defects, and operating to specification. You will also make sure that the copier appearance is satisfactory and that the administrative tasks necessary to close out a service call are performed.

If the copier will not feed paper from all of the paper trays, or if the copier makes blank or unfused copies, or if it displays a status code, return to the **Corrective Actions** section and make the necessary repairs.

1. Load 8.5 x 11 inch (A4) paper (SEF) into Tray 1. Load 8.5 x 14 inch (B4) paper (SEF) into Tray 2, if available.
2. Load document(s).
 - a. **SDF Only:** Load two Service Call Letters (or CAM test patterns) documents (SEF) into the SDF.
 - b. **Without SDF:** Place side A of the Standard Test Pattern on the Document Glass.
3. Select the Tray 1. Select a copy count of 1. Then, press the **Start** button.
4. Select the Tray 2, if available. Select a copy count of 1. Then, press the **Start** button.
5. When the copy job is complete, load 8.5 x 14 inch (B4) paper (SEF) into the Bypass Tray.
6. Select the Bypass Tray, 5 copies, and press the **Start** button.
7. Make 4 copies of side A of the copy quality test pattern. Examine the copies for obvious copy quality defects. Ensure that the copies meet the copy quality specifications in Section 3.
8. If a new copy cartridge had been installed in the copier, and it did not correct the problem, ensure that the old copy cartridge has been reinstalled in the copier. Put the new copy cartridge in the foil packaging, and ask the Customer to store the cartridge.
9. Clean the copier covers and the area around the copier, using the following materials:
USO: Formula A and a Towel.
RX: All Purpose Cleaner and a Cleaning Cloth.
10. Make two copies of the Service Call Letter. Check that the copy count meter has advanced. Show the copies to the operator or Customer, and discuss any operation problems.
11. Instruct the customer to shake the new Dry Ink Cartridge before installing it. Provide any necessary operator training.
12. Give a copy of the Service Call Letter to the operator or Customer, and place the remaining copy with the Service Log.
13. Update the Change Tag Matrix as required.
14. Give appropriate copy credits to the customer.
15. Make a record of the copy count meter in the service log. Make a record in the Service Log of all necessary actions performed during this service call. Also, record any changes that were made to the NVM.

2. STATUS INDICATOR / OTHER FAULT Repair Analysis Procedures

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A1 / A2 RAP

A1: The control logic senses a jam in the SDF while one document is copied.

A2: The control logic senses a jam in the SDF while more than one document is copied.

PROCEDURE

Ensure that the Ground Wire is secured to the frame. Close the Front Cover or cheat the interlock. **There is + 24 VDC from J323 on the SDF PWB to the machine frame.**

Y N

There is + 24 VDC from CNB-10 on the Main PWB to the machine frame.

Y N

Go to the OF 1.2 DC Power Entry RAP.

Go to Flag 7 and check the wire for an open circuit. If the wire is good, replace the SDF PWB (PL 8.1).

There is + 30 VDC from CNC-2 on the SDF PWB to the machine frame.

Y N

There is + 32 VDC from CNB-8 on the Main PWB to the machine frame.

Y N

Go to the OF 1.2 DC Power Entry RAP.

Check the fuse F301 on the SDF PWB. If the fuse is good, go to Flag 8 and check the wire for an open circuit. If the wire is good, replace the SDF PWB (PL 8.1).

Enter [5-1]. Actuate and deactuate the SDF Registration Sensor. **The Copier Jam light on the control panel switches on and off.**

Y N

A B

A

B

There is + 5 VDC from pin 3 to pin 1 on the SDF Registration Sensor.

Y N

Go to Flag 1 and check the wires for an open circuit. If the wires are good, replace the SDF PWB (PL 8.1).

Disconnect the SDF Registration Sensor P/J. **There is + 5 VDC from CNB-3 on the Main PWB to the machine frame.**

Y N

Go to Flag 2 and check the wires for a short circuit to the copier frame. If the wires are good, replace the Main PWB (REP 1.5) (PL 1.2).

Go to Flag 2 and check the wire for an open circuit or a short circuit to the copier frame. If the wire is good, replace the SDF Registration Sensor (PL 8.4).

Actuate and deactuate the SDF Exit Sensor. **The CRU light on the control panel switches on and off.**

Y N

There is + 5 VDC from pin 3 to pin 1 on the SDF Exit Sensor.

Y N

Go to Flag 10 and check the wires for an open circuit. If the wires are good, replace the SDF PWB (PL 8.1).

Go to Flag 11. Check the wire for an open circuit. If the wire is good, replace the SDF Exit Sensor (PL 8.4).

C

C

Enter [5 – 4]. Press the Start button. **The SDF Registration Clutch energizes.**

Y N

Press the Stop button. **There is + 24 VDC from CNB-12 on the Main PWB to the machine frame.**

Y N

Go to Flag 3. Check that the wire is not shorted to the copier frame.

Go to Flag 3 and Flag 4. Check the wires and the clutch for an open circuit. If the components are good, replace the SDF PWB (PL 8.1).

Press the Start button. **The voltage changes from + 24 VDC to + 1 VDC.**

Y N

Go to Flag 3 and Flag 4. Ensure the wires are not shorted together and replace the Main PWB (REP 1.5) (PL 1.2).

Replace the SDF Registration Clutch (REP 5.8) (PL 8.4).

E

E
Press the **Stop** button. Enter [5 – 3]. Press the **Start** button. The **SDF Nudger Solenoid** energizes.

Y N
Press the **Stop** button. There is **+ 24 VDC** from **CNB-7** on the **Main PWB** to the machine frame.

Y N
Go to Flag 5. Check that the wire is not shorted to the copier frame. Go to Flag 5 and Flag 6. Check the wires and solenoid for an open circuit. If the components are good, replace the SDF PWB (PL 8.1).

Press the **Start** button. The voltage changes from **+ 24 VDC** to **+ 1 VDC**.

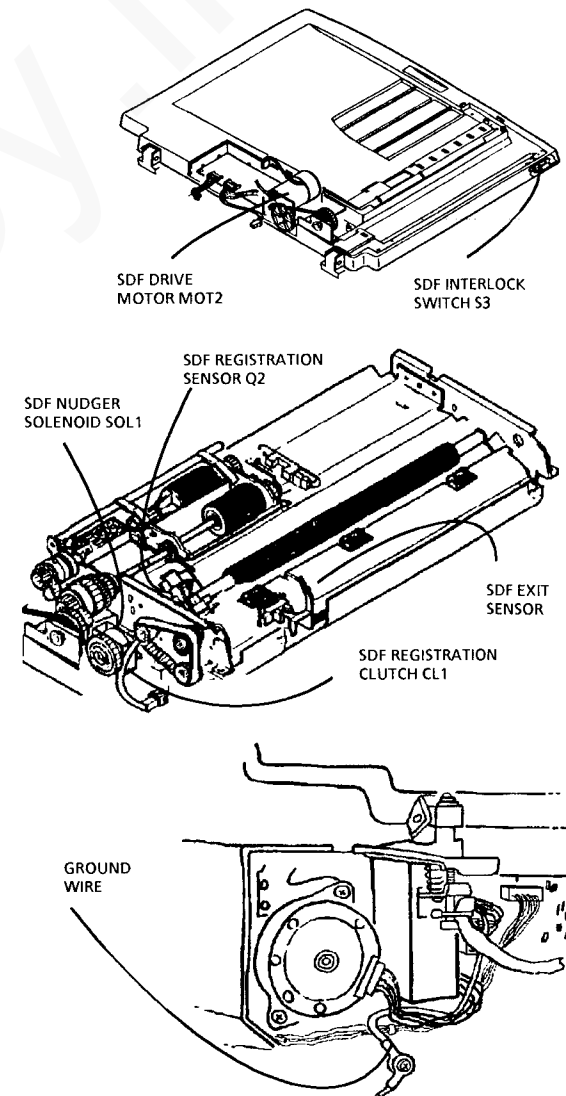
Y N
Go to Flag 5 and Flag 6. Ensure the wires are not shorted together and then replace the Main PWB (REP 1.5) (PL 1.2).

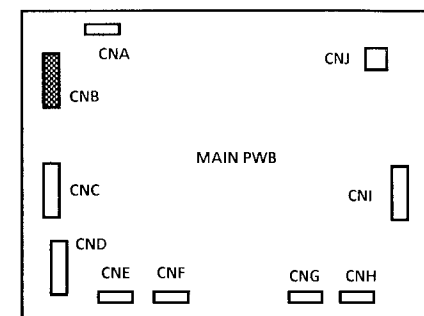
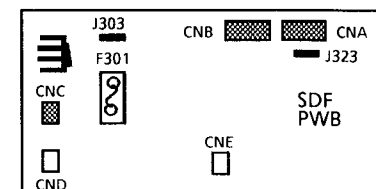
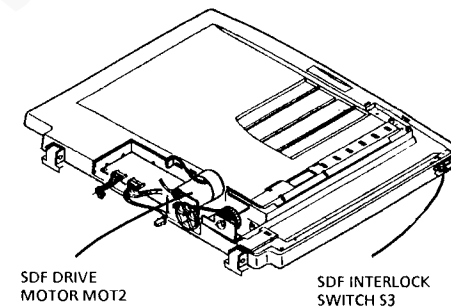
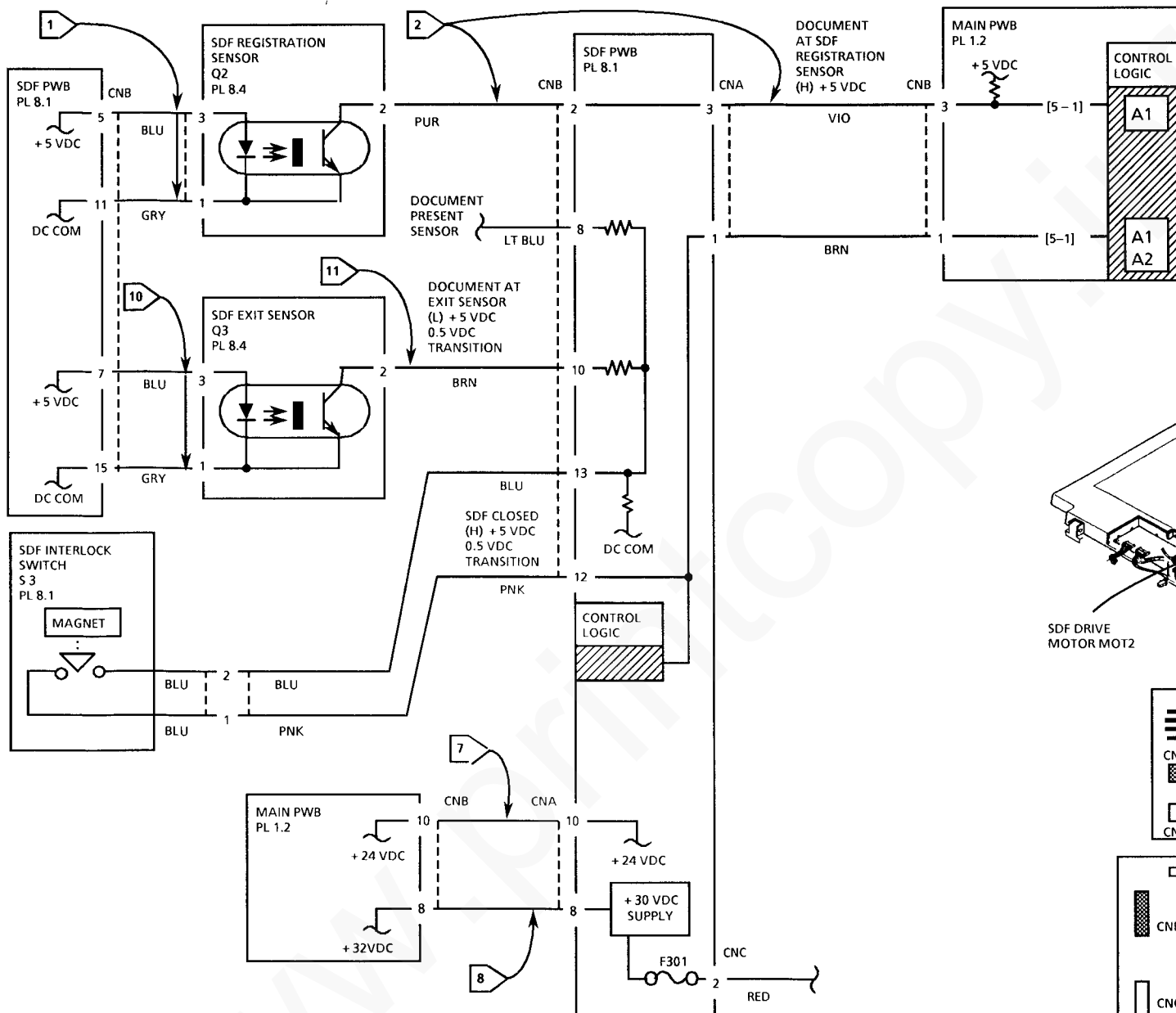
Replace the SDF Nudger Solenoid (REP 5.9) (PL 8.3).

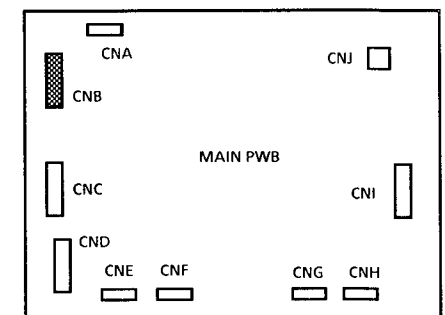
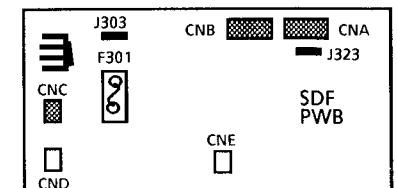
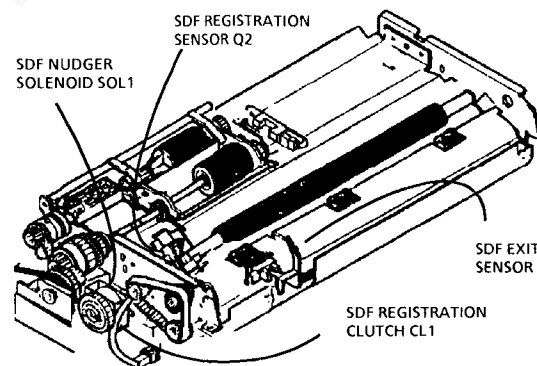
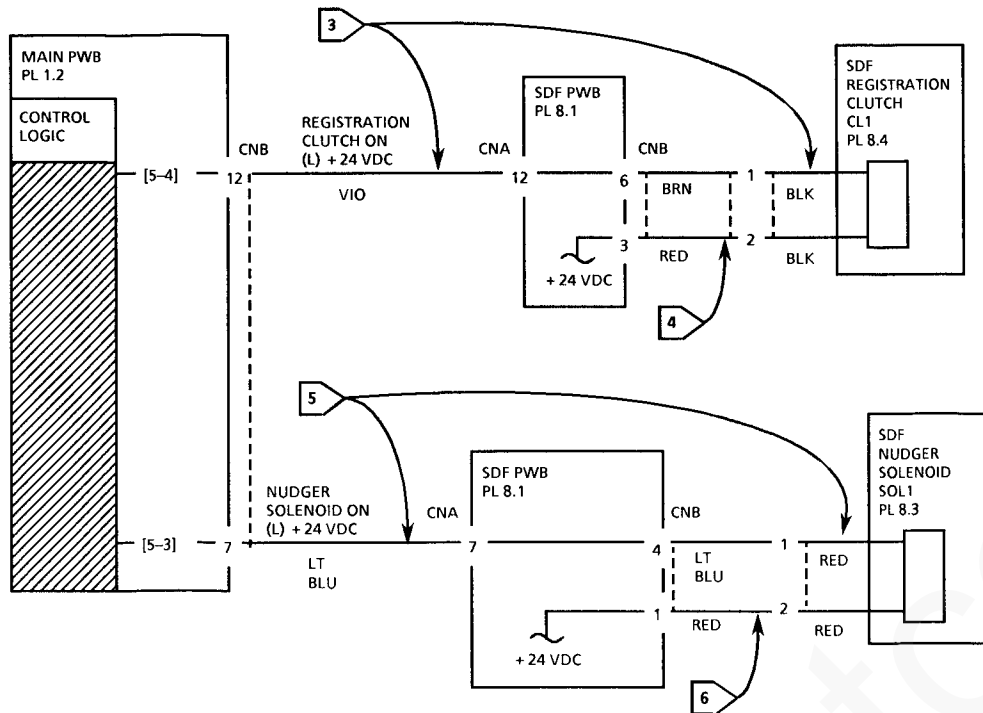
Check the following:

- Check that the Tab is installed correctly (SDF Registration Guide, REP 5.10).
- Check that the rubber pads are in the correct position to support the Document Glass (REP 6.1).
- If the SDF Registration Clutch or the SDF Nudger Solenoid is energized, go to Flag 3 or Flag 5. Check the wires for a short circuit. If the wires are good, replace the Main PWB (REP 1.5) (PL 1.2).

- Enter [5 – 2] and press the **Start** button. Manually actuate the SDF Nudger Solenoid for a few seconds. The gate should move up and the Nudger Rolls should move down. Repair the components as required (PL 8.2, PL 8.3).
- Enter [5 – 4] and press the **Start** button. Manually rotate the SDF Drive Motor. Check that the drive rolls rotate. Check that the Registration Rolls rotate. Repair as required (PL 8.3, PL 8.4).
- If the copy image is advanced on some or all the copies, ensure that the SDF Registration Clutch has a brown label (PL 8.4). Replace the clutch if the label on the clutch is not brown.
- Check the SDF document path for obstructions, burrs, or damaged components. Ensure that the rollers and the idlers rotate freely and that they are free from wear and binding.
- If the SDF Drive Motor appears to operate at high speed, or a document appears to feed too fast, go to the OF 5.2, SDF Drive Motor RAP.
- If documents do not exit the SDF, perform the following, remove the Exit Cover (REP 5.3). Install 0.02 inch shim stock between the Exit Cover and Exit Guides where the Exit Guides are mounted.







C1 RAP

The control logic senses that a sheet of paper fed from Tray 1, did not reach the Paper Feed Sensor (Q10) within the appropriate amount of time.

INITIAL ACTION

Ensure that the machine configuration codes are correct for the configuration of the copier (General Procedures in Section 6).

PROCEDURE

Make a copy using the Bypass Tray, and also Tray 2 (if installed). **The Bypass Tray and Tray 2 (if installed) operate correctly.**

Y N
Ensure the Front Cover is closed or cheat the interlock. There is +24 VDC from CNA-9 on the Lower PWB to the machine frame.

Y N
Go to the OF 1.2 DC Power Entry RAP.

There is +5 VDC from CNA-6 on the Lower PWB to the machine frame.

Y N
Go to the OF 1.2 DC Power Entry RAP.

Go to the OF 8.1 Paper Drives RAP.

Open the copier. Enter [8-7]. Press the Start button. **The Tray 1 Feed Clutch energizes.**

Y N
Press the Stop button. There is +24 VDC from CNB-1 on the Lower PWB to the machine frame.

Y N
There is +24 VDC from CNB-2 on the Lower PWB to the machine frame.

Y N

A B C D

A

B

C

D

There is +24 VDC from CNA-9 on the Lower PWB to the machine frame.

Y N
Go to the OF 1.2 DC Power Entry RAP.

Replace the Lower PWB (REP 1.6) (PL1.3).

Go to Flag 5. Check that the wire is not shorted to copier frame. Go to Flag 4 and Flag 5. Check the wires for an open circuit. If the wires are good, replace the Tray 1 Feed Clutch (PL4.5).

Press the Start button. The voltage goes from +24 VDC to +1 VDC.

Y N
Go to Flag 4 and Flag 5. Ensure the wires are not shorted together and then replace the Lower PWB (REP 1.6) (PL 1.3).

Replace the Tray 1 Feed Clutch (PL 4.5).

Enter [7-1]. Actuate and deactuate the Paper Feed Sensor. **The copier jam lamp on the Control Panel switches on and off.**

Y N
Actuate and deactuate the Tray 1 Empty Sensor. **The Tray 1 Lamp (Tray 1 250 sheet) or the Tray 2 Lamp (Tray 1 500 sheet) switches on and off.**

Y N
Go to the OF 7.1 Tray 1 Paper Indicator RAP.

E F

E

F

Go to Flag 1. Check the wires between the sensor and the Lower PWB for an open circuit. Check the circuit on the Lower PWB from CNB-4 to CNA-5 for an open circuit. **Tray 1 is 500 sheet capacity**

Y N
Replace the Paper Size / Feed PWB (PL 4.5).

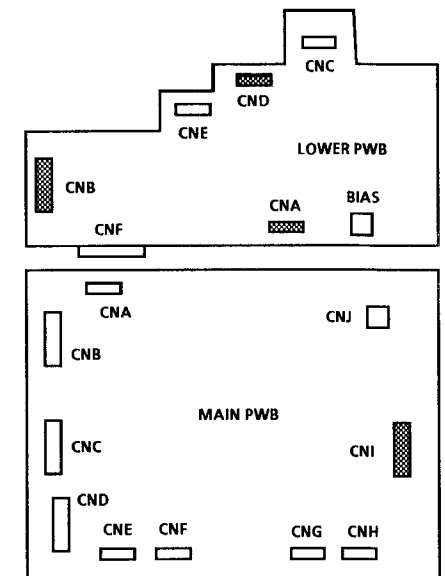
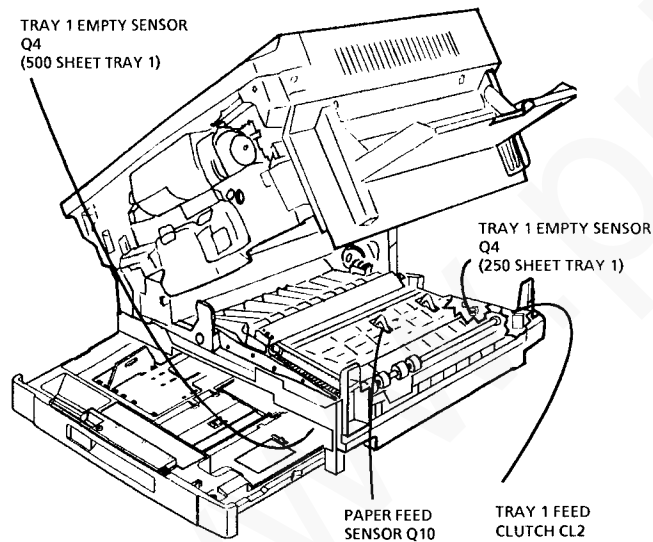
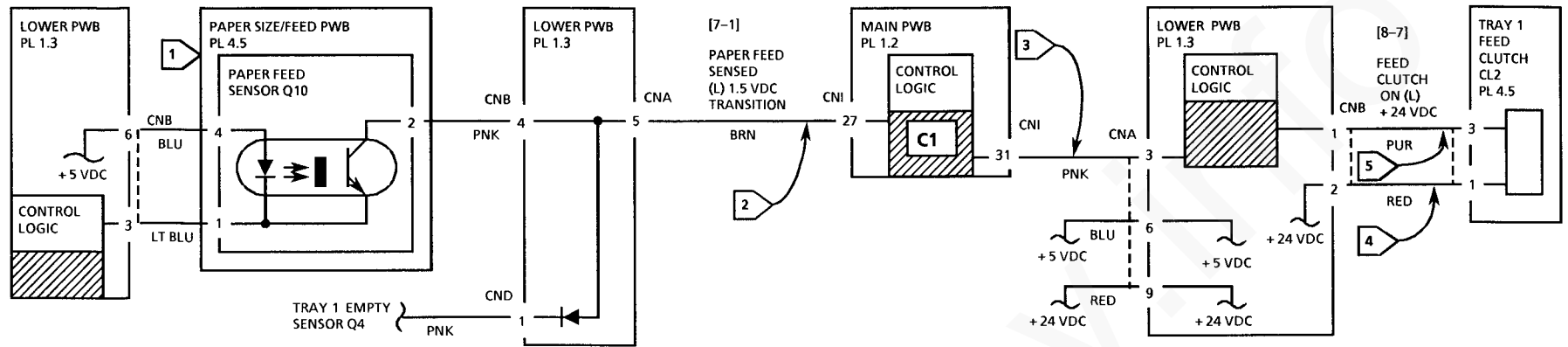
Go to the U5 RAP.

Actuate and deactuate the Tray 1 Empty Sensor for the 500 sheet or 250 sheet Tray 1. **The Tray 1 lamp (250 sheet) or the Tray 2 lamp (500 sheet) switches on and off.**

Y N
Go to the OF 7.1, Tray 1 Paper Indicator RAP.

Perform the following as required.

- Remove the tray and check that the Nudger Roll can be pulled down and moves up when released. Check that the Nudger Roll moves down during paper feed. Repair as required (PL 4.6).
- Check the Feed Roller, the Nudger Roller, the Transport Roller, and the Idler Rolls for wear, damage, or contamination. Clean or replace the rolls as required (PL 4.6).
- Clean the Feeder Drive Shaft and the components on the shaft.
- Check the condition of the drive gears that are adjacent to the Tray 1 Feed Clutch. Replace as required (PL 4.5).
- If the problem continues, replace the Tray 1 Feed Clutch (PL 4.5).



C2 RAP

The control logic senses that a sheet of paper did not reach the Tray 2 Jam Sensor (Q7) within the appropriate amount of time, or the Bypass Tray is not securely installed.

INITIAL ACTION

- Ensure that the Tray 2 Transport Cover closes securely.
- Ensure that the Bypass Tray is installed securely (REP 7.2).
- If a C1 fault occurs using Tray 1, and a C3 fault occurs using the Bypass Tray, go to the OF 8.1, Paper Drives RAP.

PROCEDURE

Enter [7-2]. Actuate and deactuate the Tray 2 Jam Sensor. The copier jam lamp on the Control Panel switches on and off.

Y N
With paper in Tray 2, open and close Tray 2. The Tray 1 lamp switches off and on.

Y N
Go to the OF 7.2, Tray 2 Paper Indicator RAP.

Go to Flags 2 and 3. Check the wires for an open circuit or a short circuit to the copier frame. Check the diode on the Lower PWB between CNF-1 to CNA-4. The diode should indicate infinite resistance in one direction and low resistance (0.6 Kohms) in the other direction. Replace the Lower PWB (PL 1.3) if the diode is failed. Otherwise, replace the Tray 2 Jam Sensor (PL 4.7).

Open and close the Tray 2 Transport Cover. The Dry Ink lamp switches on and off.

Y N
A B

A

B

Open and close Tray 1 while measuring the voltage from CNA-5 on the Lower PWB to the copier frame. The voltage drops by at least 0.5 VDC when Tray 1 is opened.

Y N

Go to Flags 5 and 6. Check the wires for an open or a short circuit to the copier frame. If the wires are good, replace the Transport Open Sensor (PL 4.4). If the problem continues, replace the Lower PWB (REP 1.6) (PL 1.3).

Go to Flag 8 and check the wire for an open circuit. If the wire is good, replace the Main PWB (REP 1.5) (PL 1.2).

Enter [8-3]. Remove Tray 2. Open the Tray 2 Transport Cover. Press the Start button and rotate the Nudger Roll in the direction of paper movement. While rotating the Nudger Roll, the Takeaway Roll rotates in the direction of paper movement, after a small delay.

Y N

Press the Stop button. There is + 24 VDC from CNF-12 on the Lower PWB to the machine frame.

Y N

Replace the Lower PWB (REP 1.6) (PL 1.3).

Ensure that [8-3] is entered. Press the Start button. There is approximately 1 VDC from CNF-9 on the Lower PWB to the machine frame.

Y N
C D E

C

D

E

Go to Flag 7. Check the wires for an open circuit. If the components are good, replace the Tray 2 Feed Clutch (PL 4.7).

Remove Tray 2 (REP 7.3). Check the drives components (PL 4.4, PL 4.7). If the components are good, replace the Tray 2 Feed Clutch (PL 4.7).

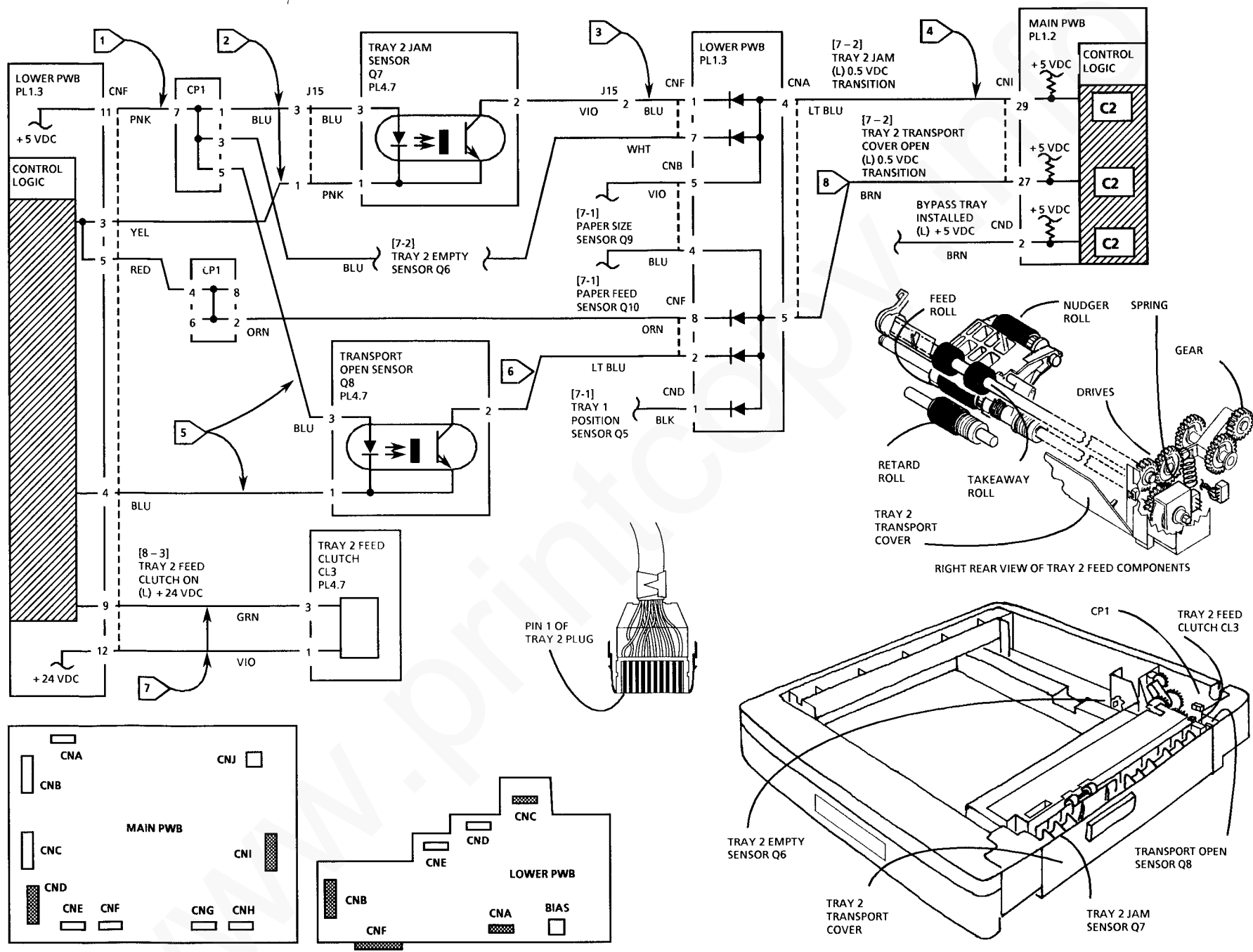
There is approximately 0 VDC from CND-2 on the Main PWB to the copier frame.

Y N

Go to the C3 RAP.

Check or perform the following:

- If a C2 is displayed and both the Tray 1 and red paper symbol lamps are flashing, go to Flag 8 and check the wire for a short circuit.
- Remove the tray and check that the Nudger Roll can be pulled down and moves up when released. Check that the Nudger Roll moves down during paper feed. Repair as required (REP 7.3) (PL 4.7).
- Check the Feed Roller, the Nudger Roller, and the Idler Rolls for wear, damage, or contamination. Clean or replace the rolls as required (PL4.7).
- Clean the Feeder Drive Shaft and the components on the shaft. Ensure that the Spring that is on the Feed Support is not folded (PL4.7).
- Check the condition of the drive gears that are adjacent to the Tray 2 Feed Clutch. Replace as required (PL 4.4).
- Ensure that the Tray 2 Transport Cover closes securely.
- Replace the Tray 2 Feed Clutch (PL 4.7).
- If a C2 fault is displayed and the copier does not have a Tray 2, go to the OF 3.3, Communication RAP.



C3 RAP

The control logic senses a paper misfeed from the Bypass Tray, or that the Bypass Tray is not seated correctly, or that the Bypass Tray is out of paper after the **Start** print button is pressed.

INITIAL ACTION

If entry to this RAP is from the C2 RAP, go to Flag 8 and check the wire for an open circuit. If the wire is good, replace the Main PWB (REP 1.5) (PL 1.2).

PROCEDURE

Make a copy using Tray 1, and also Tray 2 (if installed). Tray 1 and Tray 2 (if installed) operate correctly.

Y N

Go to the OF 8.1 Paper Drives RAP.

Enter [8-5]. Press the **Start** button. The Nudger Roller in the Bypass Tray moves down.

Y N

Press the **Stop** button. There is + 24 VDC from CND-7 on the Main PWB to the copier frame.

Y N

There is + 24 VDC from CND-9 on the Main PWB to the copier frame.

Y N

Go to Flag 1, Flag 2, Flag 3, Flag 6, and Flag 7. Ensure the wires are not shorted to the copier frame. Then replace the Main PWB (REP 1.5) (PL 1.2).

Go to Flag 1 and Flag 3. Check the wires for an open circuit. If the wires are good, replace the Bypass Nudger Solenoid (PL 4.9).

A

B

A

B

Press the **Start** button. The voltage changes to + 1 VDC.

Y N

Go to Flag 1, Flag 3, Flag 4, and Flag 5. Ensure the wires are not shorted together and replace the Main PWB (REP 1.5) (PL 1.2).

Remove the Bypass Tray (REP 7.2). Check or perform the following:

- Check the components that are actuated by the Bypass Nudger Solenoid (PL 4.9) are free to move.
- Check that the Bypass gate moves up and down freely (PL 4.10B). Replace the Support Frame (PL 4.9) if the gate does not move freely.
- If no problems are found, replace the Bypass Nudger Solenoid (PL 4.9).

Press the **Stop** button. There is + 24 VDC from CND-5 on the Main PWB to the machine frame.

Y N

Go to Flag 2, Flag 6, and Flag 7. Check the wires and solenoid for an open circuit. If the components are good, replace the Bypass Feed Solenoid (PL 4.10).

Enter [8-4]. Press the **Start** button. The voltage changes to approximately + 1 VDC.

Y N

Go to Flag 1, Flag 2, Flag 6, and Flag 7. Ensure that the wires are not shorted together and replace the Main PWB (REP 1.5) (PL 1.2).

C

C

Check or perform the following:

- Remove the Bypass Tray (REP 7.2). Check the Bypass Feed Solenoid for mechanical binding.
- The main drives for a mechanical problem
- The Feed Roller, the Nudger Roller, the Retard Roller, and the Idler Rolls for wear, damage, or contamination. Clean or replace the rolls as required (PL 4.9).
- If the problem continues, replace the clutch components that are actuated by the Bypass Feed Solenoid (PL 4.9).

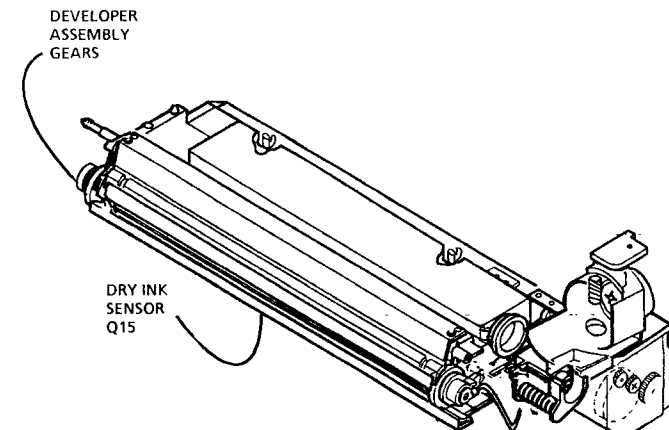
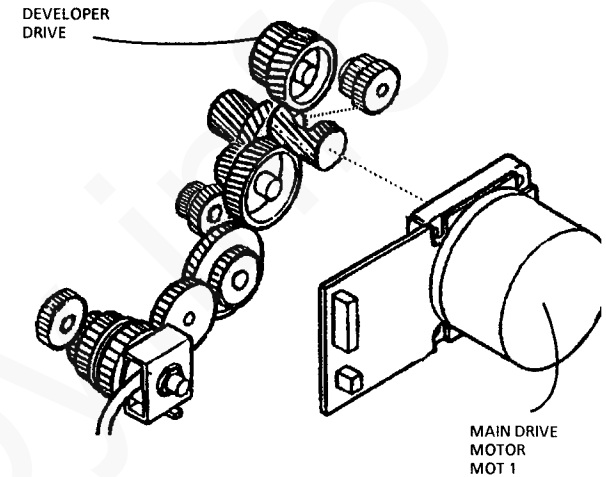
EE-EL / EE-EU RAP

EE-EL: The control logic senses an overtuned condition during the auto developer setup.

EE-EU: The control logic senses an undertoned condition during the auto developer setup.

PROCEDURE

- Insure that the copier has Tag 2.
- Remove the Developer Assembly (REP 9.3). Ensure that five drive gears on the Developer Assembly are free of damage (PL 5.3).
- Check the developer drive.
- Check that the Developer Assembly contains Developer material.
- Check the label on the Dry Ink Sensor. A yellow label indicates the sensor does not need a shim. A white label indicates the sensor needs a shim (PL 5.2A).
- Change developer (REP 9.8) (PL 5.2A).
- Go to the OF 9.5 Dry Ink Sensor RAP.



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E1 RAP

The control logic senses that a sheet of paper did not reach the Exit Sensor, Q14, after the sheet actuated Paper Feed Sensor, Q10.

INITIAL ACTION

- If the problem occurs while making two-sided copies from the Bypass Tray, ensure the side-one copy is loaded with the lead edge to the right. Ensure that the paper is at least 80 gm² / 20 lb.
- If the E1 fault occurs only while using Tray 1, go to the C1 RAP, or if only while using Tray 2, go to the C2 RAP, or if only while using the Bypass Tray, go to the C3 RAP.

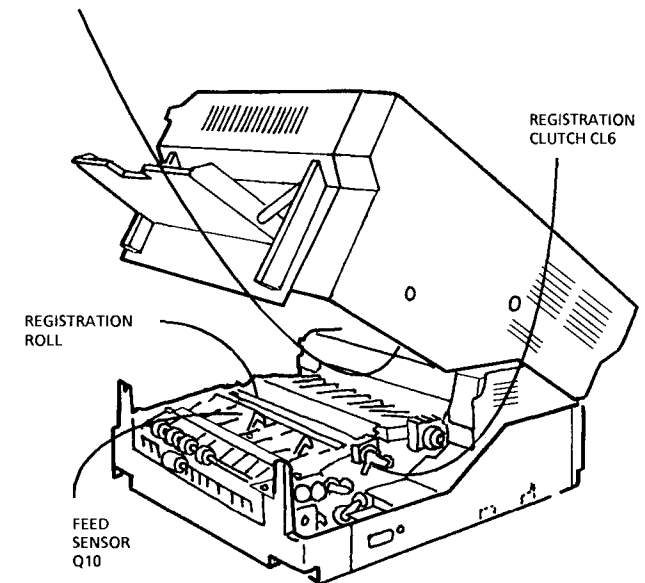
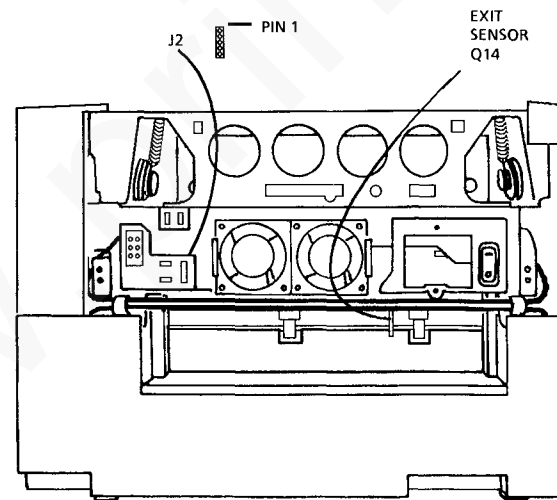
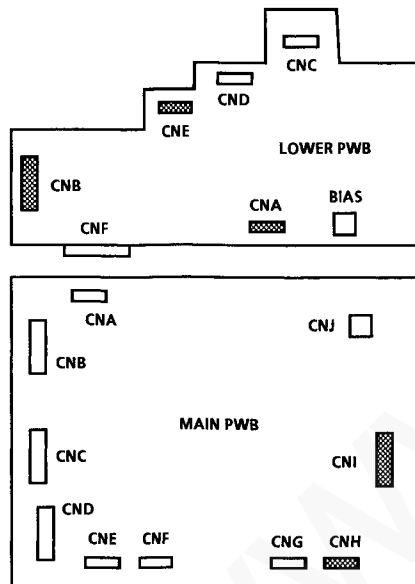
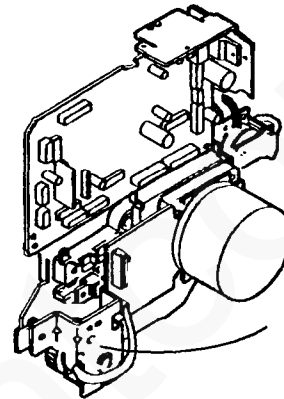
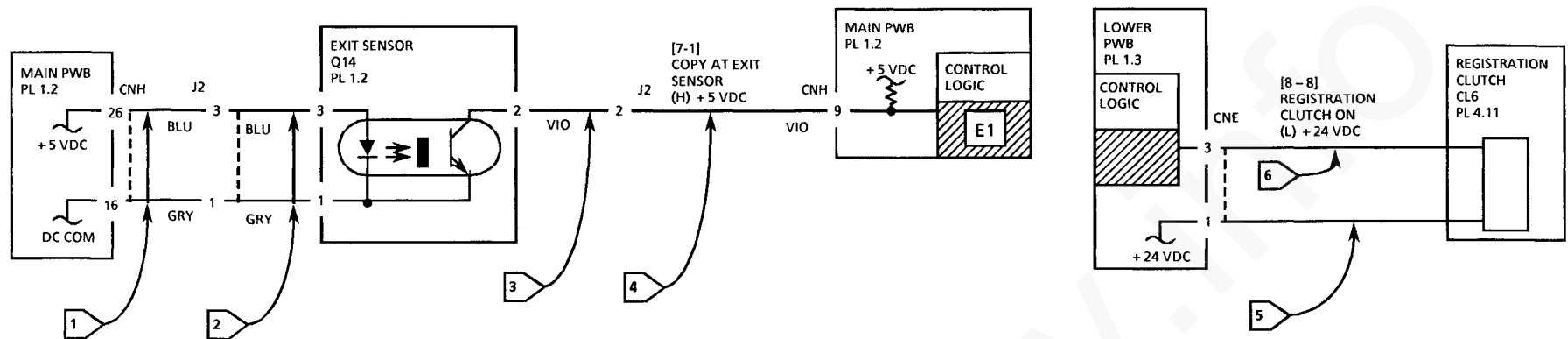
PROCEDURE

Enter [7-1]. Actuate and deactuate the Exit Sensor. The CRU lamp on the Control Panel switches on and off.

Y	N	
	Actuate and deactuate the Exit Sensor. The voltage drops from 4.8 VDC to 0 VDC from CNH-9 on the Main PWB to the copier frame.	
Y	N	
	Disconnect J2. The voltage is 4.8 VDC from CNH-9 on the Main PWB to the copier frame.	
Y	N	
	Go to Flag 4. Check the wire for a short circuit to copier frame or DC common. If the wire is good, replace the Main PWB (REP 1.5) (PL 1.2).	
	There is +5 VDC from CNH-26 to the copier frame.	
Y	N	
	Ensure that there is no short circuit in the wire from CNH-26 to the sensor and replace the Main PWB (REP 1.5) (PL 1.2).	
A	B	C

A	B	C
		Go to Flags 1, 2, and 3. Check the wires for an open circuit or a short circuit to copier frame or DC common. If the wires are good, replace the Exit Sensor (PL 1.2).
		Replace the Main PWB (REP 1.5) (PL 1.2).
		Ensure that the actuator on the Feed Sensor is free to move. Actuate and deactuate the Feed Sensor. The Copier Jam lamp on the Control Panel switches on and off.
Y	N	
		Go to the C1 RAP.
		Rotate the gear on the Registration Clutch clockwise as viewed from the rear. The Registration Roll remains stationary.
Y	N	
		Go to Flag 6. Check the wires for a short circuit to the copier frame. If the wires are good, replace the Registration Clutch (PL 4.11).
		Enter [8-8]. Press the Start button. Rotate the gear on the Registration Clutch clockwise as viewed from the rear. The Registration Roll rotates in the direction of paper travel.
Y	N	
		Press the Stop button. There is +24 VDC from CNE-3 on the Lower PWB to the machine frame.
Y	N	
		There is +24 VDC from CNE-1 on the Lower PWB to the machine frame.
Y	N	
		Replace the Lower PWB (PL1.3).
		Go to Flag 6. Check that the wire is not shorted to copier frame or DC common. Go to Flag 5 and Flag 6. Check the wires for an open circuit. If the wires are good, replace the Registration Clutch (PL4.11).
D	E	

D	E
	Press the Start button. The voltage changes to approximately +1 VDC.
Y	N
	Go to Flag 5 and Flag 6. Ensure the wires are not shorted together and replace the Lower PWB (REP 1.6) (PL 1.3).
	Replace the Registration Clutch (REP 5.8) (PL 4.11).
	Enter [8-6]. Press the Start button. The Feed / Transport Clutch actuates.
Y	N
	Go to the OF 8.1, Paper Drives RAP.
	Check the following components for wear, damage, contamination, obstructions, or binding. Repair or replace the components as required.
	• Remove the Fuser Assembly (REP 10.1). Check the Stripper Fingers for the Pressure Roll and Fuser Roll. Replace as required (PL 6.1, PL 6.2).
	• The Registration Roll, the Plastic Paper Guide over the Registration Roll, the Drive Belt at the front end of the Registration Roll, and the Idler Roll (PL 4.11)
	• The Drive Gear on the Fuser Assembly (PL6.1) and the adjacent drive gears (PL 2.2, 6.2)
	• Check the upper and lower transport guides for burrs or foreign objects in the paper path (PL 4.11, PL 4.12, PL 5.6, PL 6.1, or PL 6.2).
	• Check the Registration Buckle (ADJ 8.1)
	• Replace the Feed/Transport Clutch (PL 2.3).
	• Check the Bypass Guides (PL 4.10A)
	• If the problem continues, replace the Registration Clutch (REP 5.8) (PL4.11).



E3 RAP

The control logic senses that the Exit Sensor, Q14, is always Hi.

INITIAL ACTION

Ensure that the Exit Sensor, Q14, is securely connected, and that the sensor is clean.

PROCEDURE

Enter [7 – 1] . Actuate and deactuate the Exit Sensor. The Copy Cartridge light switches on and off.

Y **N**
There is +5 VDC from CNH-26 to the copier frame.

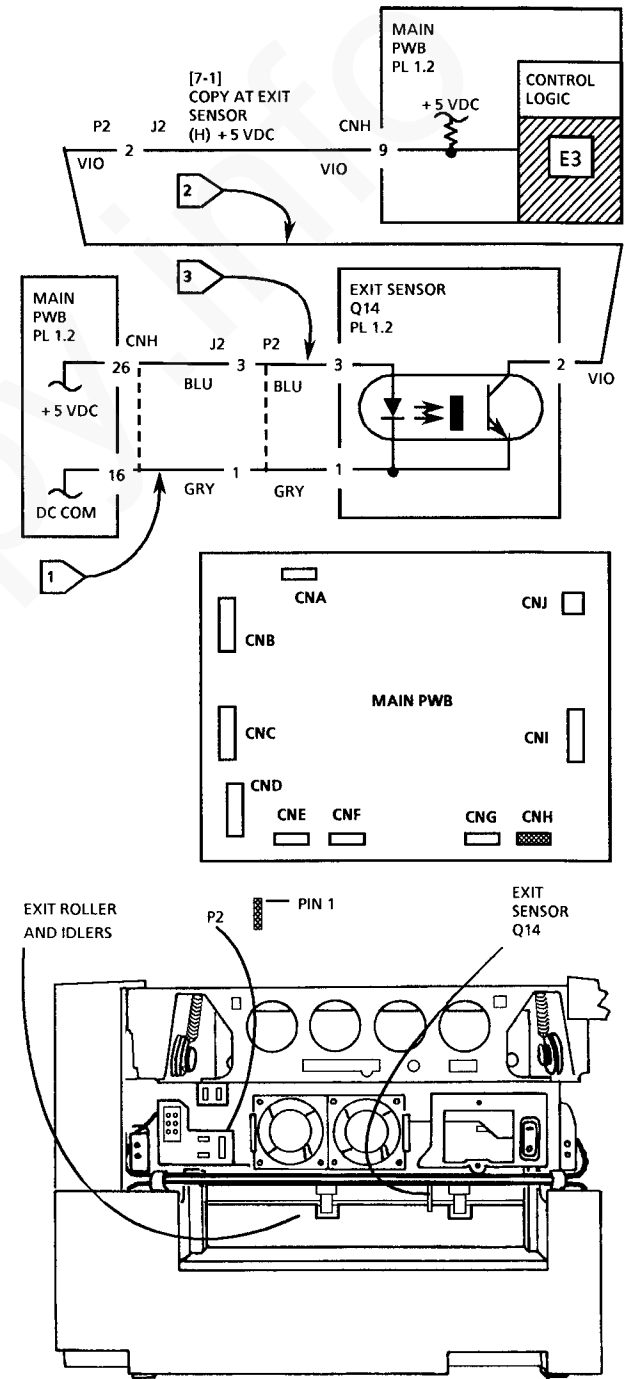
Y **N**
Go to Flag 3. Check the wire for a short circuit to the copier frame, then replace the Main PWB (REP 1.5) (PL 1.2).

Go to Flag 1, Flag 2, and Flag 3. Check the wires for an open circuit. If the wires are good, replace the Exit Sensor (PL 1.2). If the problem continues, replace the Main PWB (REP 1.5) (PL 1.2).

Perform the following or check the following components for wear, damage, contamination, obstructions, or binding. Repair or replace the components as required.

- Exit Sensor (PL 1.2) and Actuator
- Exit Roller (PL 6.2) and the Exit Roller Idlers
- The drives for the Fuser exit components (PL 6.2, PL 1.3, PL 2.1).

- Output Tray (PL 7.2).
- Remove the Fuser Assembly (REP 10.1). Check the Stripper Fingers for the Pressure Roll and Fuser Roll. Replace as required (PL 6.1, PL 6.2). Check the Fuser Cleaning Roll. Replace as required (REP 10.7) (PL 6.2).



J0 RAP

The control logic senses that an automatic developer setup is in progress.

This code is displayed when the copier is switched on for the first time to perform automatic developer setup. This process takes approximately 3 to 5 minutes to complete.

PROCEDURE

If the automatic developer process is not complete in approximately 3 to 5 minutes, go to the RAP if a status code is displayed. If no status code is displayed, replace the Main PWB (REP 1.5) (PL 1.2). If the problem continues, go to the OF 9.5 Dry Ink Sensor RAP.

J1 RAP

The Main PWB senses that the Dry Ink Concentration is below the specification.

INITIAL ACTION

- Ensure there is Dry ink in the Dry Ink Cartridge.
- Shake the Dry Ink Cartridge.
- Check the Copier Level (ADJ 1.1).
- Check the Tag Matrix.
 - Ensure Tag 1 or 43 is installed and Tag 2 has been performed. If the copier does not have Tag 1 or 43, install the Toner Auger Repair Kit.
 - Ensure Tag 2 is installed. If not, perform Developer Housing Guide Pin Procedure (General Service Note in Section 6).
 - Ensure Tag 4 is installed.
 - Ensure Tag 5 is installed.
- Check the Customer Documents. J1's will result under the following conditions:
 - Continuous copying of documents with area coverage of 30% or more
 - Copying with the document cover open
 - Color documentsTo recover from a J1 Status Code resulting from these conditions, open and close the front cover. It may be necessary to initiate the tone up procedure by opening and closing the front cover several times.

PROCEDURE

NOTE: In the next service action, a small amount of Dry Ink may spray out. Keep away from the Dispenser Housing while observing the Dry Ink Dispense Gear.

Remove the Dry Ink Cartridge and return the dispenser to the normal operating position. Enter [9-8]. Press the Start button. Check that the Dry Ink Dispense Gear rotates and press the Stop button. The Dry Ink Dispense Gear rotates.

Y N
A B

A

B

Go to the OF 9.6, Dry Ink Motor RAP.

The two flanges on the face of the Dry Ink Dispense Gear are present and undamaged.

Y

N

Repair as required (PL 5.4).

If Tag 43 was just installed, follow the Y path. Continue here if Tag 43 was installed before this service call. With [9-8] still entered, press the Start button. Observe Dry Ink in the opening in the Dry Ink Dispenser Housing and then press the Stop button. The Dry Ink moves or sprays out freely.

Y

N

- Check for blockages in the Toner Hopper Auger Area.
- Ensure that the seal that is around the opening in the Dispenser Housing is not loose or damaged (PL 5.4).
- Perform the following to check the operation of the Auger Scraper:
- Remove the Toner Hopper (REP 9.6).
 - Remove the screw and gear from the front of the hopper.
 - Rotate the Toner Auger clockwise from the rear. The Mixer on the Toner Auger should be audible and the Plastic Fingers of the Auger Scraper should move in and out of the spaces in the Toner Auger.
 - Repair or replace as necessary (PL 5.4).

Press the Locking Tab and rotate the Collar of the Dry Ink Cartridge to open the cartridge. The opening is free of obstruction.

Y

N

C

D

C

D

Remove the obstruction or replace the Dry Ink Cartridge.

Open the copier. Move the Dispenser Housing to the open position. Make a 15 mm wide strip of paper, any length. Position approximately 25 mm of the paper into the interface between the Mag Roll Spacer and the photoreceptor. Move the Dispenser Housing to the operating position. Pull out the paper. The paper should be difficult to pull out. The paper is difficult to pull out.

Y

N

Remove the Developer Assembly (REP 9.3) and perform the following:

- Rotate the Dispenser Housing back and forth while observing the Pins (2). If the Pins do not move fully in the slots, repair as required (PL 5.2B).
- Check that the slots in the copier where the pins engage the slots are free of foreign material.
- Check that the Developer Drive Support, located behind the Main Drive Motor, can be pulled to the left and returns to the right (PL 2.1).
- Reinstall the Developer Assembly and Dry Ink Bottle and ensure that the Green Panel on the Dispenser Housing is pushed in until it stops.

E

J1 RAP (continued)

E
Remove the Developer Assembly (REP 9.3). Ensure that all 6 gears are free from wear, damage, contamination, and binding. The gears are good.

Y N
Replace the gears as required (PL5.3).

Reinstall the Developer Assembly. Do not install the Dry Ink Cartridge. There is 0 ohms from the Dispenser Support to the machine frame.

Y N
Check that the Developer Assembly Installation Screw is fully screwed into the frame.
Clean or repair the ground strap.

F

F
Reinstall the Dry Ink Cartridge. Enter [4 – 1] and press the Start button. Check that the hex values that are displayed on the control panel can be found in Table 1. The displayed values are in the Table 1.

Y N
Replace the Developer (REP 9.8) (PL 5.2A).

NOTE: After replacing Developer, a [20-1] routine should be run. A step to run [20-1] is included in the Developer replacement instructions. Do not do it twice.

After replacing the Developer, repeat the check with [4-1]. If the displayed values are still not found in Table 1, go to the OF 9.5 Dry Ink Sensor RAP.

Make 3 copies of the test pattern. The .7 density block of the copy is as dark or darker than the 1.0 density block of the test pattern.

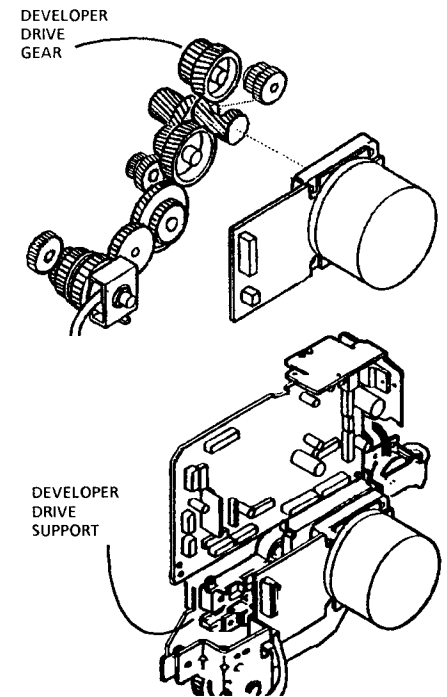
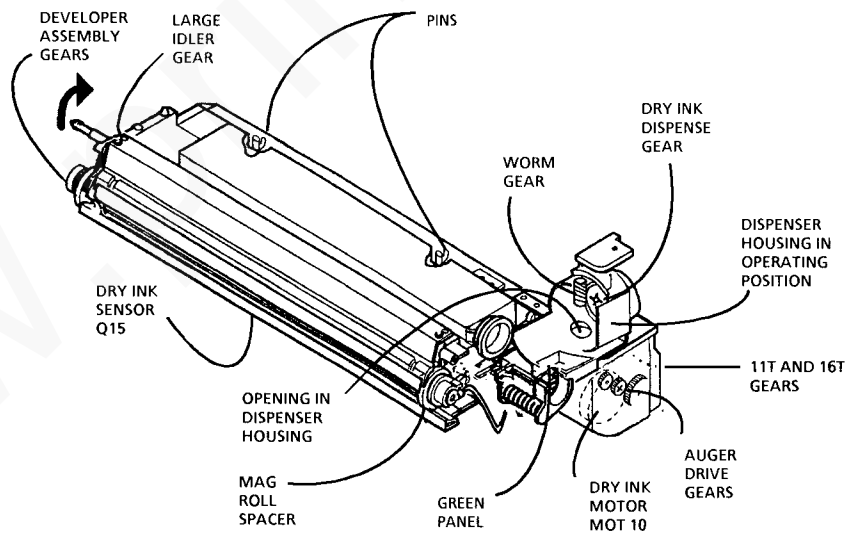
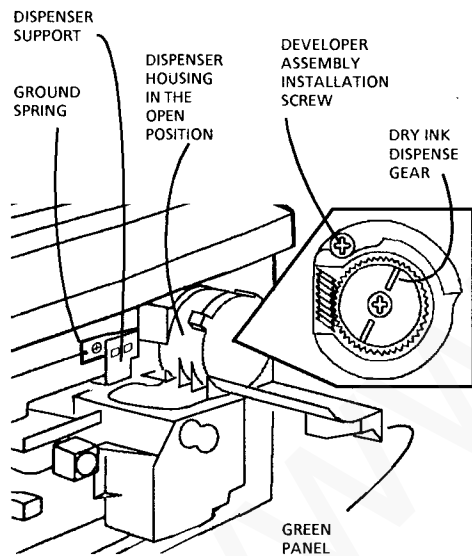
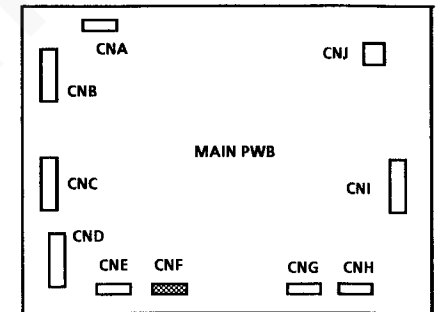
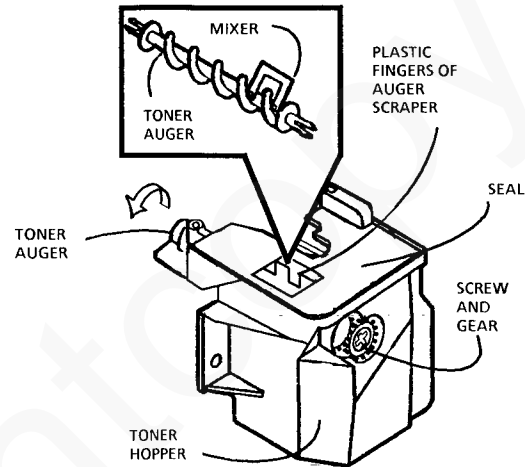
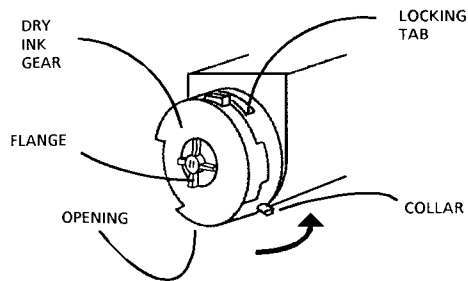
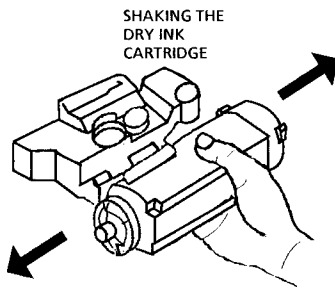
Y N
Replace the Developer (REP 9.8) (PL 5.2A).

NOTE: After replacing Developer, a [20-1] routine should be run. A step to run [20-1] is included in the Developer replacement instructions. Do not do it twice.

The checkout is complete.

Hex Values		
5D	75	8C
5E	5E	8D
5F	76	8E
60	77	8F
61	78	90
62	79	91
63	7A	92
64	7B	93
65	7C	94
66	7D	95
67	7E	96
68	7F	97
69	80	98
6A	81	99
6B	82	9A
6C	83	9B
6D	84	9C
6E	85	9D
6F	86	9E
70	87	9F
71	88	A0
72	89	A1
73	8A	A2
74	8B	A3

Table 1



J3 RAP

The Main PWB senses that the copy cartridge is not installed correctly.

PROCEDURE

Pull out the copy cartridge and then push in the copy cartridge. Ensure that the copy cartridge is latched securely. **The problem continues.**

Y N

Remove the copy cartridge and clean the connector at the rear of the copy cartridge. Also, clean the plug on the rear of the copier frame. Reinstall the copy cartridge.

If the problem continues, replace the copy cartridge.

Enter [3 – 3]. A display of 4 indicates a hard-stop copy cartridge in 18,000 copies. A display of 7 indicates a cartridge that will operate until copy quality becomes unusable. The value is 0.

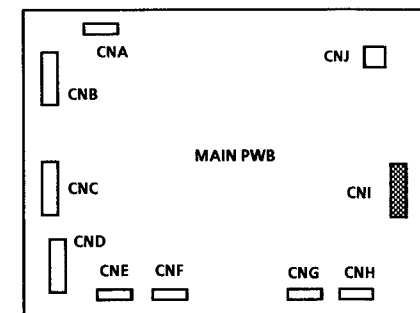
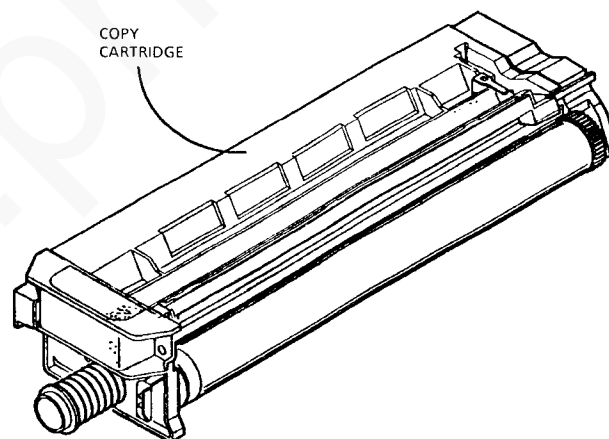
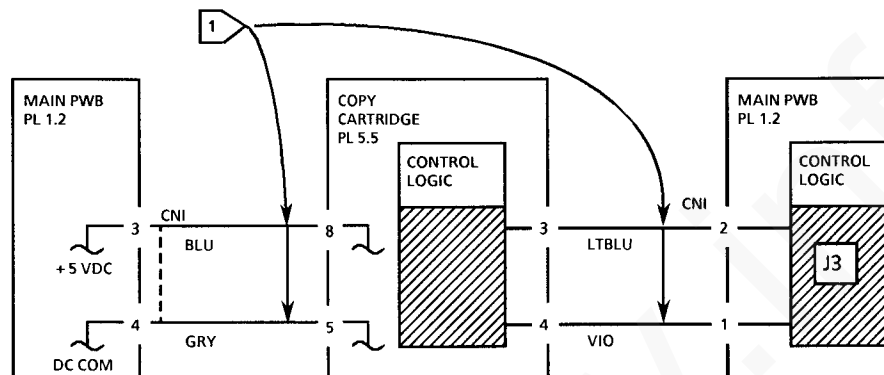
Y N

Go to Flag 1. Check the wires for an open circuit or a short circuit to the copier frame. Ensure that P/J CNI is connected securely.

If the problem continues, replace the Copy Cartridge (PL 5.5).

If the problem continues, replace the Main PWB (REP 1.5) (PL 1.2).

Go to Flag 1. Check the wires for an open circuit or a short circuit to the copier frame. If the wires are good, replace the Copy Cartridge (PL 5.5). If the problem continues, replace the Main PWB (REP 1.5) (PL 1.2).



J7 / J8 RAP

- J7:** The control logic senses that the copy cartridge has reached its end of life.
- J8:** The control logic senses that an incorrect copy cartridge has been installed, or the power was switched off and on after a J7 was declared.

PROCEDURE

Enter [3 - 2] and record the value. Add 000 to the number. This number is the quantity of copies made on the copy cartridge. Enter [3 - 3]. A 4 in the display indicates a 18,000 copy cartridge. A 7 indicates a 64,000 copy cartridge. Compare the value in [3 - 3] with the recorded value. **The copy cartridge made the required number of copies.**

Y N
Remove the copy cartridge and clean the the electrical connection at the rear of the copy cartridge. Install the copy cartridge and ensure that the copy cartridge is latched securely. **The problem continues.**

Y N
The checkout is complete.

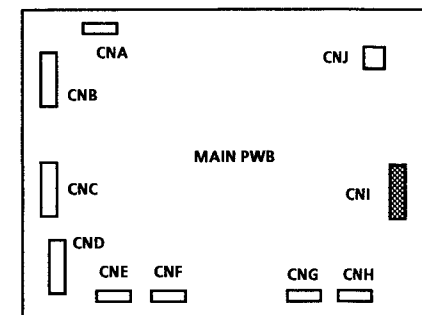
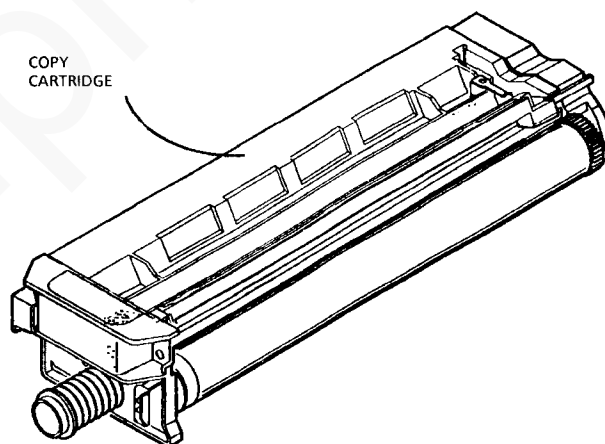
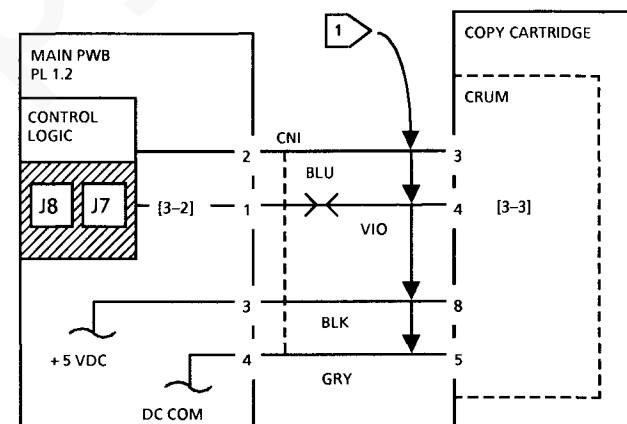
Go to Flag 1. Check the wires for an open circuit or a short circuit to the copier frame. The wires are good.

Y N
Exit diagnostics and return to service call procedures..

A B

- A**
- B** Enter [3 - 6]. An 18 in the display indicates that the copier is setup for a copy cartridge that is capable of making 18,000 copies. A 64 indicates that the copier is setup for a cartridge that is capable of making 64,000 copies. The value in [3 - 6] indicates the same copy capability as the value in [3 - 3].
- Y N**
Replace the Copy Cartridge (PL 5.5).
Replace the Main PWB (REP 1.5) (PL1.2).

Replace the Copy Cartridge (PL 5.5).



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L6 RAP

The Control Logic senses that the Key Counter is not plugged in, or the Coin-Op requires a coin before making a copy.

INITIAL ACTION

Ensure that the Key Counter is 24 VDC.

PROCEDURE

Remove the Lower Rear Cover (REP 14.4). Disconnect P/J5 (adjacent to the transformer). Enter [50-1], enter 0 and press the Start button. Switch the copier off and on. The copier is ready to copy.

Y N

Go to Flags 1 and 2 and check the wires for an open circuit or a short circuit to the copier frame. If the wires are good, Replace the Main PWB (REP 1.5) (PL1.2).

There is + 24 VDC from P/J5-2 to P/J5-5.

Y N

Go to Flag 3. Check the wires for an open circuit or a short circuit to the copier frame.

Enter [50-1], enter 1, and press the Start button. Switch the copier off and on. There is + 5 VDC from CNH-17 to the copier frame.

Y N

Go to Flag 2. Check the wire for a short circuit to the copier frame. Then replace the Main PWB (REP 1.5) (PL 1.2).

Connect P/J 5. Insert the Auditron Key Counter or enable the coin-op using the bypass key. There is + 5 VDC from CNH-17 to the copier frame.

Y N

A B

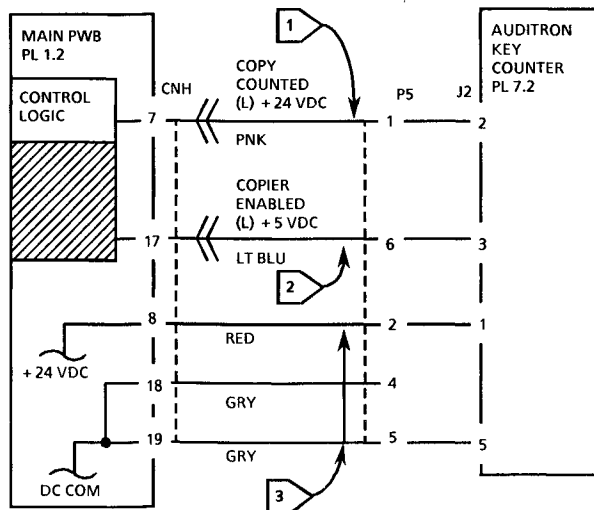
A

B

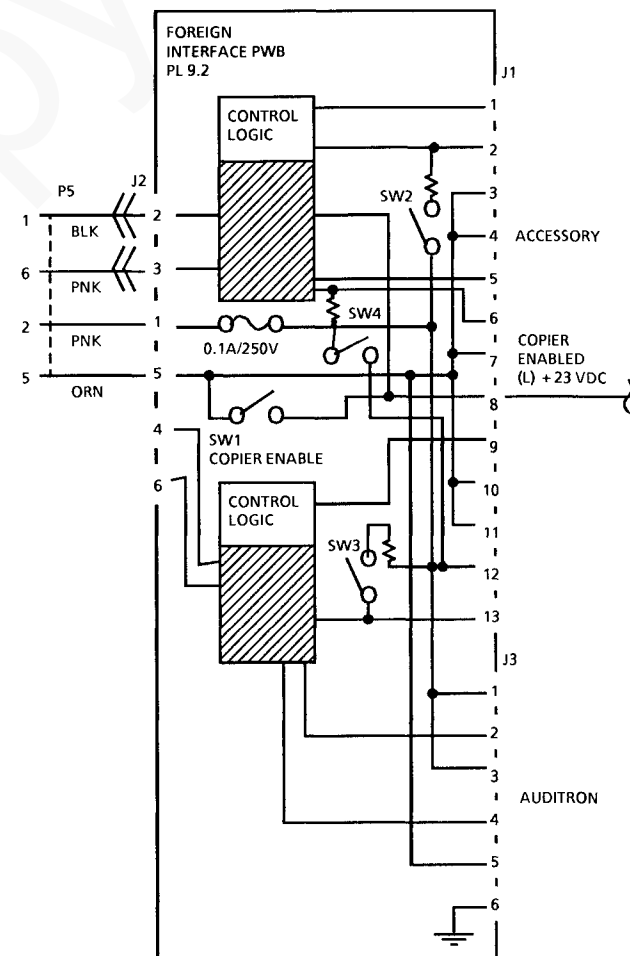
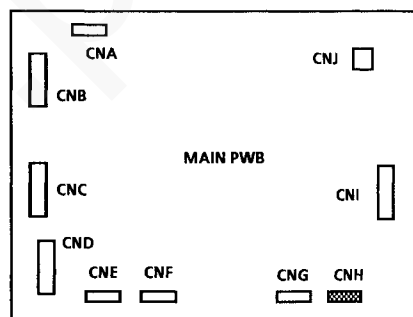
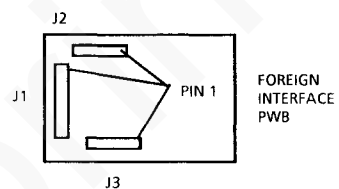
Check/perform the following:

- If the copier has an Auditron only, check the Auditron wire harness. If the wires are good, replace the Auditron (PL 7.2).
- If the copier has a Foreign Interface PWB, check the Foreign Interface PWB fuse. Ensure that the switches are set to open. Disconnect J1 and also J3 if present. Apply a short circuit to J1-8. If the copier is ready, the problem is in the accessory. If the copier is not ready, replace the Foreign Interface PWB (PL 9.2).

Replace the Main PWB (REP 1.5) (PL1.2).



	USCO AUDITRON	RX COPYTRON	US COINOP
SW1	OPEN	OPEN	OPEN
SW2	OPEN	CLOSED	OPEN
SW3	OPEN	CLOSED	OPEN
SW4	OPEN	CLOSED	OPEN



U1 RAP

The main PWB senses that the Main Drive Motor did not energize, or that the motor did not operate at the correct speed.

PROCEDURE

Open the copier. Cheat the Interlock Switch. Switch off the power, and then switch on the power while observing the upper drives. The Main Drive Motor energizes.

Y N

CAUTION

In the next step, the housing of the Main Drive Motor may rotate.

Remove the Main Drive Motor without disconnecting the P/J's (2) (REP 4.1). Hold the Main Drive Motor. Switch on the power, and then switch off the power. The Main Drive Motor energizes.

Y N

Check that +32 VDC is measured from CNG-9 and -10 on the Main PWB to the copier frame. Check that +5 VDC is measured from CNG-5 on the Main PWB to the copier frame. The voltages are present.

Y N

Go to the OF 1.2, DC Power Entry RAP.

Enter [4-1]. Measure the voltage from CNG-3 on the Main PWB to the machine frame and then press the Start button. The voltage goes from +5 VDC to +2.5 VDC.

Y N

A B C D

A

B

C

D

Go to Flag 1 and check the wires for an open circuit or short circuit to the copier frame. If the wires are good, replace the Main Drive Motor (PL 2.3).

Enter [4-1] and press the Start button. The voltage changes from +5 VDC to +2.5 VDC from CNG-3 to the copier frame.

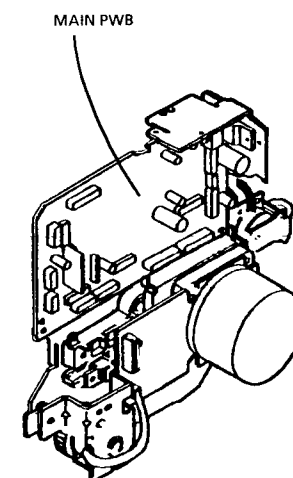
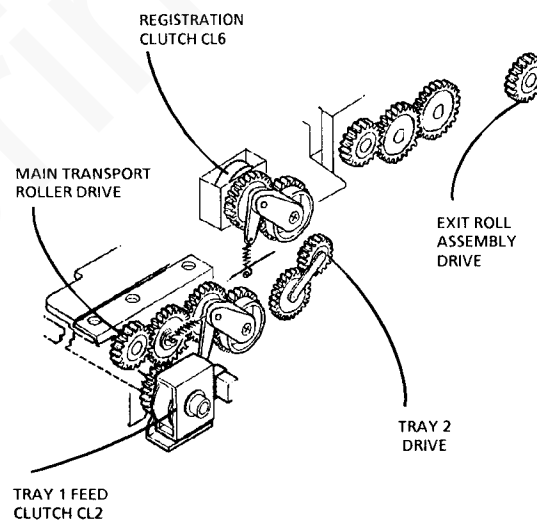
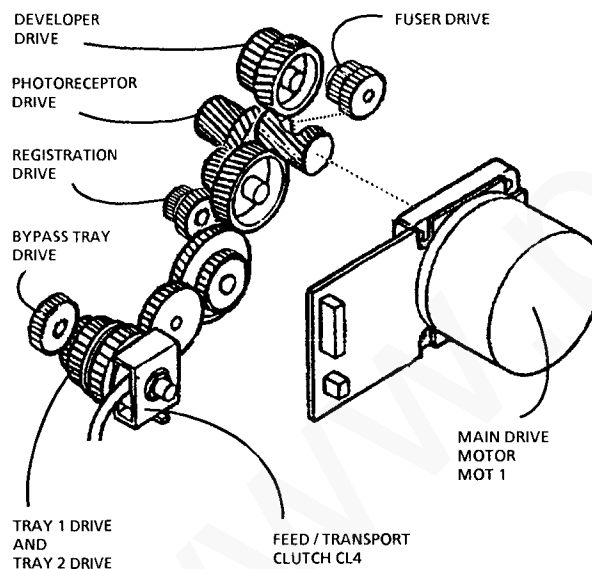
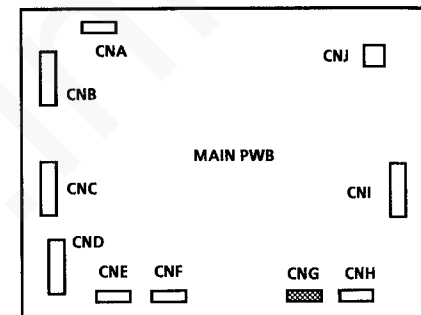
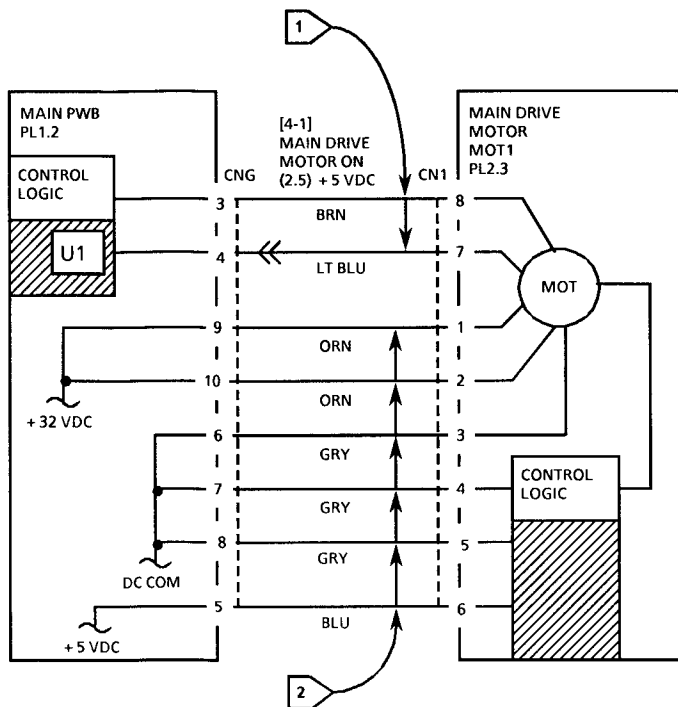
Y N

Replace the Main PWB (REP 1.5) (PL 1.2).

Replace the Main Drive Motor (PL 2.3).

There is a binding problem in the drives. Check the upper drives and the lower drives for worn, damaged, contaminated, or binding components. Also, check the module components driven by the Main Drive Motor. Repair or replace the components as required.

The Main Drive Motor appears to be operating correctly. Check that the P/J's are secure. Check the upper drives and the lower drives for worn, damaged, contaminated, or binding components. Also, check the module components driven by the Main Drive Motor. Repair or replace the components as required.



U2 RAP

The Main PWB senses that the Full Rate Carriage did not move, or that the carriage did not return to the home position.

INITIAL ACTION

- Ensure that the shipping screw that locks the half-rate carriage has been removed.
- Check for a broken Scan Cable. If a broken cable is found, replace the cable (REP 6.4) (PL 3.1A).

PROCEDURE

Enter [6-2]. Block and unblock the Carriage Home Sensor. The copy cartridge lamp on the Control Panel switches on and off.

Y N
Disconnect the Carriage Home Sensor. There is +5 VDC from CNH-25 on the Main PWB to the copier frame.
Y N
Go to Flag 3. Check the wire for an open circuit or a short circuit to the copier frame, then replace the Main PWB (REP 1.5) (PL 1.2).
There is +5 VDC from pin 3 to pin 2 on the connector for the Carriage Home Sensor.
Y N
Go to Flag 2. Check the wires for an open circuit or short circuit to the copier frame. If the wires are good, replace the Main PWB (REP 1.5) (PL 1.2).
Replace the Carriage Home Sensor (PL 3.1A).

A

A

Enter [6-1]. Press the Start button and check the scan of the mirror. The mirror carriages scan correctly.

Y N
Disconnect CNC on the Main PWB. There is +32 VDC from both CNC-5 and CNC-6 on the Main PWB to the copier frame.

Y N
The voltage is measured on just one of the pins.

Y N
Go to the OF 1.2, DC Power Entry RAP.

Go to Flag 4. Check the wires for a short circuit to the copier frame. Then replace the Main PWB (REP 1.5) (PL 1.2).

Connect CNC on the Main PWB. There is +32 VDC from CNC-1, CNC-2, CNC-3, and CNC-4 on the Main PWB to the copier frame.

Y N
Go to Flag 1. Check the wires for an open circuit or a short circuit to the copier frame. If the wires are good, replace the Scan Drive Motor (PL 3.1B).

Check the scan components for binding of loose hardware. Repair or replace as required (PL 3.1A, PL 3.1B).

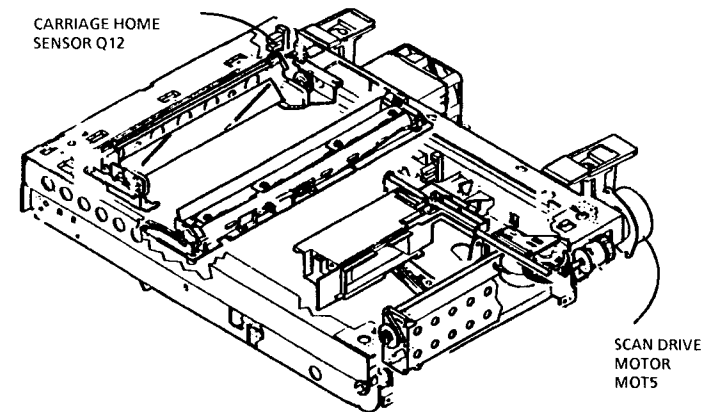
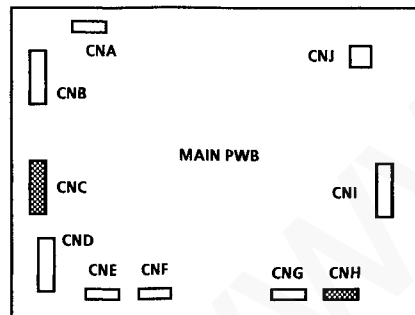
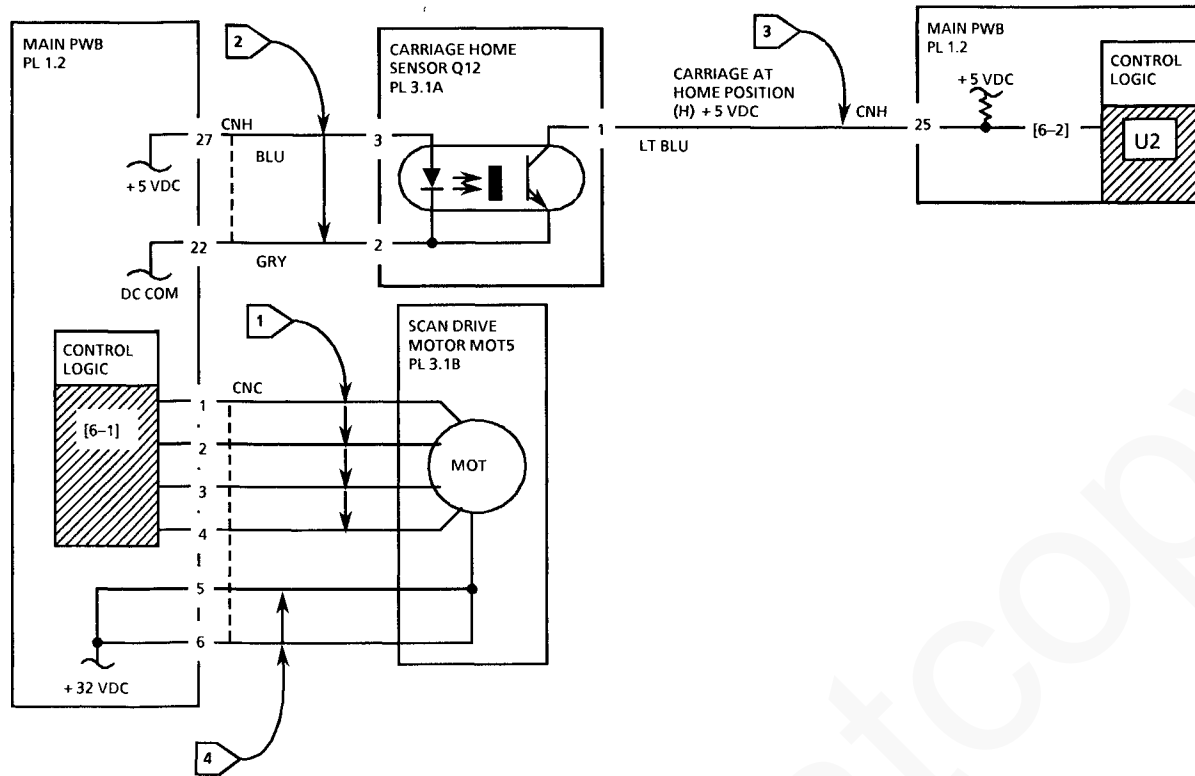
B

B

Check the Cable Pulleys (PL 3.1A, PL 3.1B) for wear, damage, contamination, or binding.

Check the scan components for binding. Repair or replace as required (PL 3.1A, PL 3.1B).

If the problem continues, replace the Main PWB (REP 1.5) (PL 1.2).



U3 RAP

The Main PWB senses that the Lens is not in the correct position.

PROCEDURE

Enter [6-2]. Press the Start button. Block and unblock the Lens Home Sensor. The Dry Ink lamp on the Control Panel switches on and off.

Y N
Disconnect the Lens Home Sensor. There is +5 VDC from CNH-30 on the Main PWB to the copier frame.

Y N
Go to Flag 3. Check the wire for an open circuit or a short circuit to the copier frame. Then replace the Main PWB (REP 1.5) (PL 1.2).

There is +5 VDC from pin 3 to pin 2 on the connector for the Carriage Home Sensor.

Y N
Go to Flag 2. Check the wires for an open circuit or short circuit to the copier frame. If the wires are good, replace the Main PWB (REP 1.5) (PL 1.2).

Replace the Carriage Home Sensor (PL 3.1A).

Disconnect CNE on the Main PWB. There is +24 VDC from CNE-5 on the Main PWB to the machine frame.

Y N
Go to Flag 1. Check the wire for a short circuit. If the wire is good, go to the OF 1.2, DC Power Entry RAP.

A

A

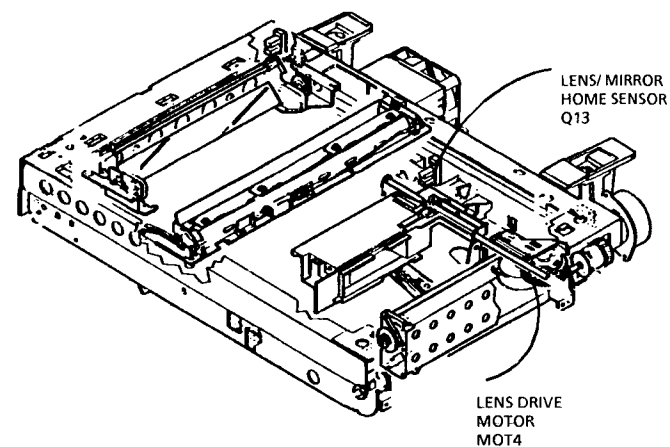
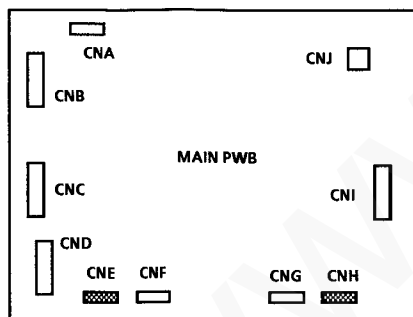
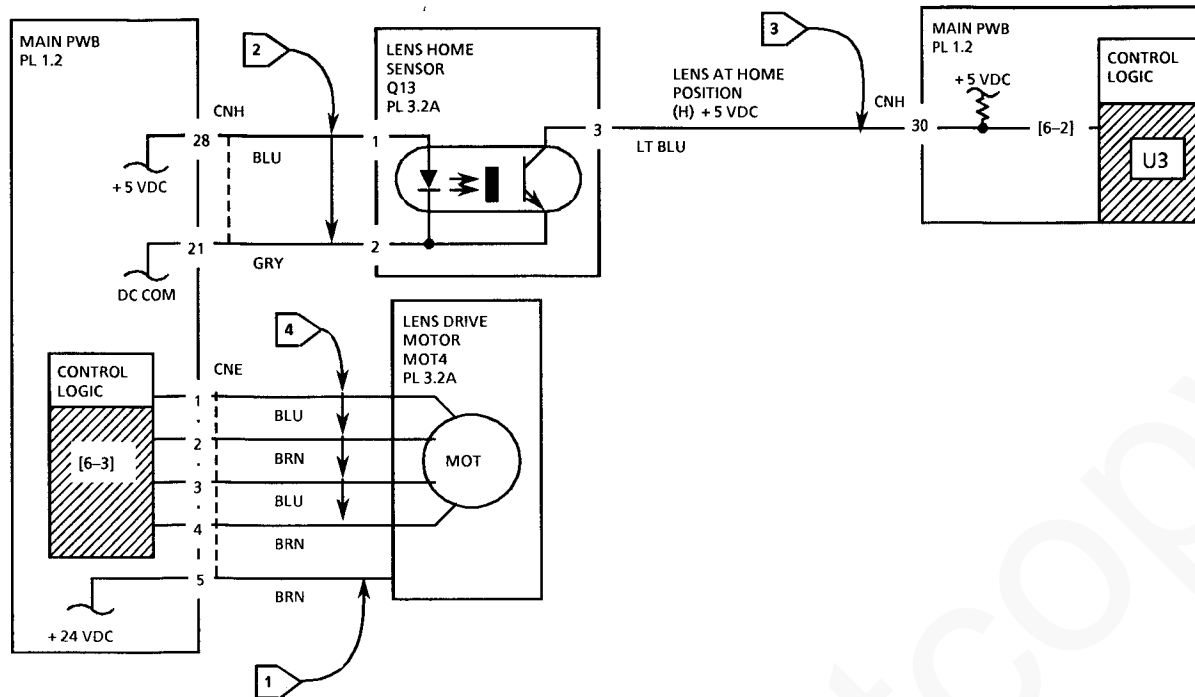
Connect CNE on the Main PWB. There is +24 VDC from CNE-1, CNE-2, CNE-3, and CNE-4 on the Main PWB to the machine frame.

Y N
Go to Flag 4. Check the wires for an open circuit. If the wires are good, replace the Lens Drive Motor (REP 6.4) (PL3.2A).

Enter [6-3]. Press the Start button. The lens moves and then stops momentarily at each of the reduction and enlargement positions shown on the control panel.

Y N
Check the Lens drive components for wear, damage, obstructions, binding, contamination, or loose hardware.

Check the pins in the connectors CNE and CNH on the Main PWB for damage. Ensure that the P/J's are tight when connected.



U4-01 RAP

The control logic has not received a signal from the Fuser Thermistor (RT1).

INITIAL ACTION

- Ensure that the connector for the Thermistor is connected securely.
- If the copier is below room temperature as a result of storage and transportation in temperatures below room temperature, and the problem occurs after initial installation, switch off the copier and try again in a few hours.

PROCEDURE

NOTE: With a good Thermistor, the resistance can be observed, on the DMM, to increase as the temperature of the Fuser Heat Roll decreases.

Disconnect the Thermistor connector. Measure the resistance across the Thermistor at the connector (J4-1 to J4-2). There is approximately 2 Kohms (hot Thermistor) to 200 Kohms (cold Thermistor) measured.

Y N
There is infinite resistance measured.
Y N
Go to Flag 1. Check the wires for a short circuit to the copier frame. If the check of the wires is good, replace the Thermistor (PL 6.1). If the problem continues, replace the Main PWB (REP 1.5) (PL1.2).
Replace the Thermistor (PL 6.1).

Go to Flag 1. Check the wires for an open circuit or a short circuit to the copier frame. If the check of the wires is good, replace the Main PWB (REP 1.5) (PL 1.2).

U4-02 / U4-03 RAP

U4-02: The control logic senses that an overtemperature condition exists.

U4-03: The control logic senses that an undertemperature condition exists.

INITIAL ACTION

- Clear the code by entering [20-52].
- After the repair, replace all components that were damaged by too much heat.
- Ensure that the rear vents of the copier are free from obstruction.

PROCEDURE

Remove the Fuser Assembly. Reset the Overtemperature Thermostat (if required). Check that the Thermistor is clean and free from damage, and that the Thermistor is touching the Fuser Heat Roll. The checks are good.

Y N
Clean, repair, or replace the Thermistor (PL 6.1).

Go to Flag 1. Check the wires for a short circuit to the copier frame. The check of the wires is good.

Y N
Repair the wires.

Reinstall the Fuser Assembly. Connect the meter from CNC-1 on the Input Power PWB to the copier frame. Switch on the copier. There is approximately +1.2 VDC measured.

Y N
Go to Flag 2. Check the wire for an open circuit or a short circuit to the copier frame. If the wire and the connectors are good, replace the Main PWB (REP 1.5) (PL1.2).

Connect the meter from CNC-4 on the Input Power PWB to the copier frame. There is approximately +24 VDC measured.

Y N
A B

A

B

Go to Flag 3. Check the wire for an open circuit or a short circuit to the copier frame. If the wire and the connectors are good, replace the Main PWB (REP 1.5) (PL1.2).

Disconnect the J3 connector at the front of the copier to the Fuser Assembly. Enter [10-1]. There is 115/220/240 VAC measured across the connector (the non-Fuser Assembly side) when the Start button is pressed.

Y N
Go to Flag 4. Check the wires for an open circuit. If the wires are good, replace the Input Power PWB (PL1.3).

Measure the continuity across the two pins of the other side of the connector. There is continuity.

Y N
Remove the Fuser Assembly. Measure the continuity of the Fuser Heat Rod. There is continuity.

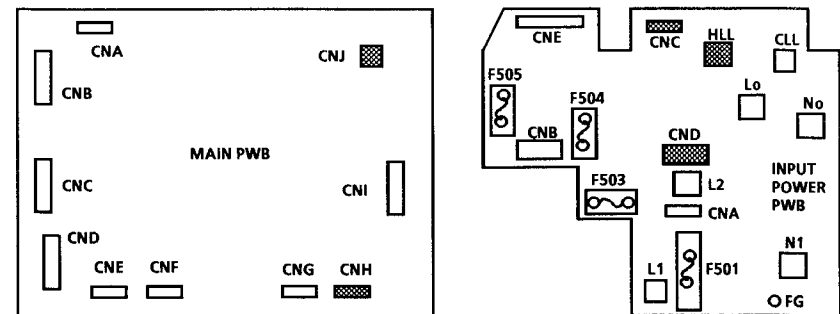
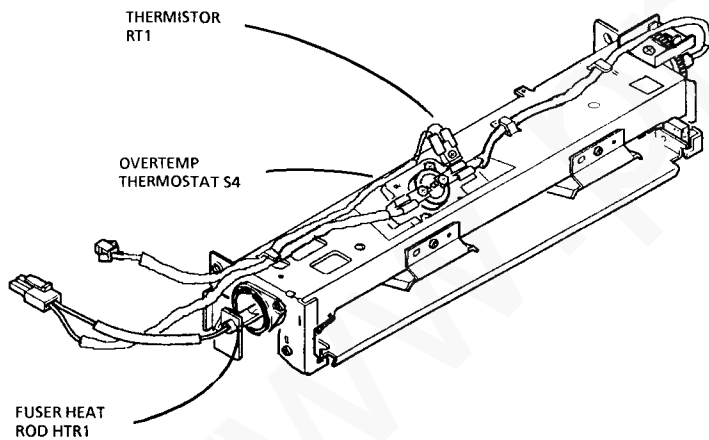
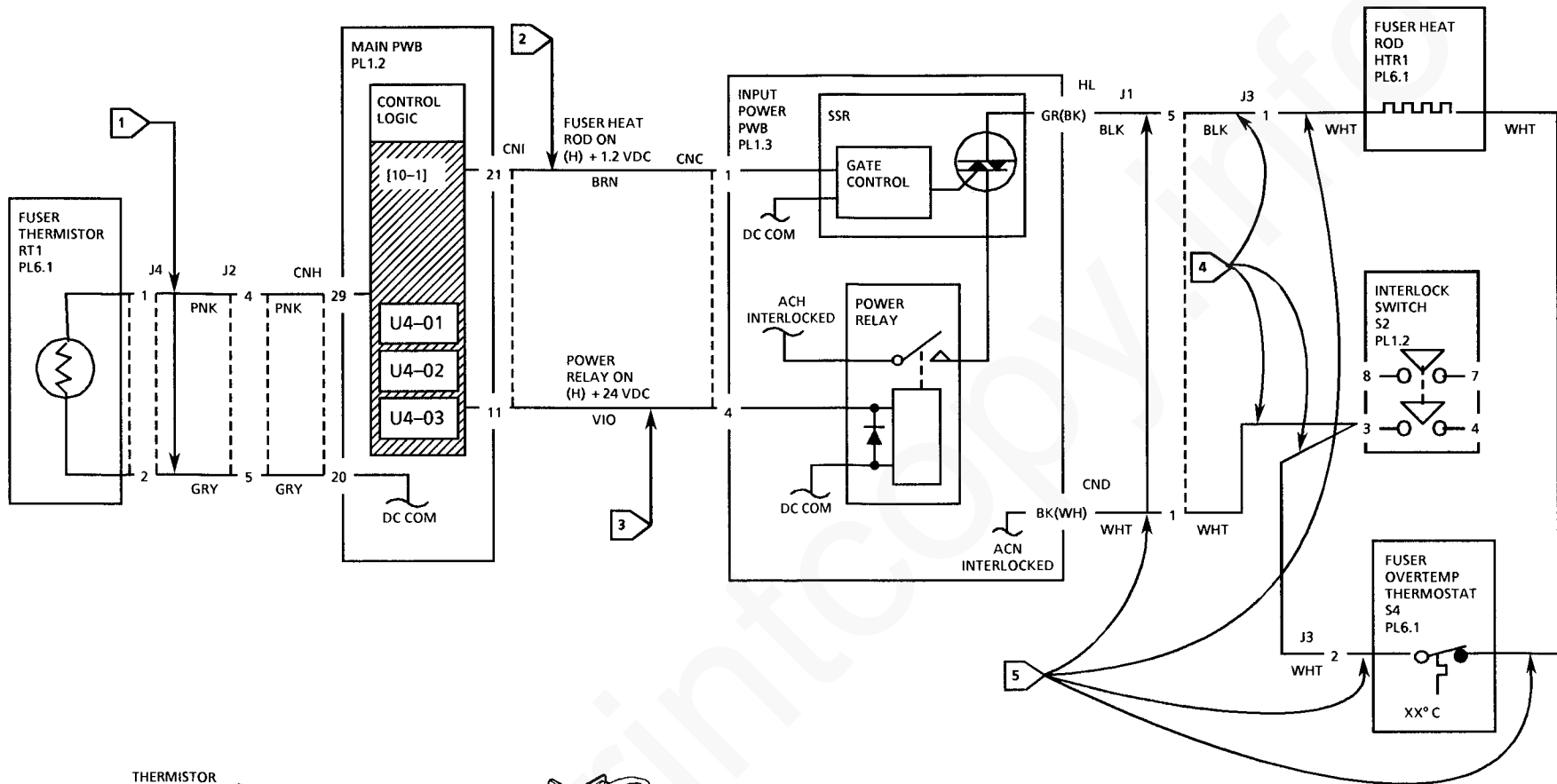
Y N
Replace the Fuser Heat Rod (PL 6.1).

Measure the continuity of the Overtemperature Thermostat. There is continuity.

Y N
Replace the Overtemperature Thermostat (PL 6.1).

Go to Flag 5. Check the wires for an open circuit. Check the Fuser Temperature (ADJ 10.1).

Go to Flag 4. Check the wires for an open circuit. Check the Fuser Temperature (ADJ 10.1).



U5 RAP

The control logic senses that the Tray 1 Empty Sensor does not actuate within a few seconds after the Tray 1 Lift Motor energizes.

INITIAL ACTIONS

- Ensure that the configurations codes are correct (Configuration Codes chart in Diagnostics in Section 6).
- The paper in the tray must be toward the right front corner of the paper tray.

PROCEDURE

Enter [7-1]. Actuate and deactuate the Tray 1 Empty Sensor. **The Tray 2 lamp in the Copier Diagram switches on and off.**

Y N

Repair the actuator if its not free to move (PL 4.5). If the actuator moves freely, go to the OF 7.1 Tray 1 Paper Indicator RAP.

Remove Tray 1. Check the Lift Gear, that is on the rear of the Tray 1, for damage. The Lift Gear teeth should be up (PL 4.1). Manually rotate the gear counterclockwise, as viewed from the front, to check that the Lift Plate moves up. Repair any problems (PL 4.1). Reinstall Tray 1. With [7-1] entered, pull out and push in Tray 1 to deactuate and actuate the Tray 1 Position Sensor. **The Tray 1 lamp in the Copier Diagram switches off and on.**

Y N

Check the voltage from CNA-5 on the Lower PWB to the copier frame. Actuate and deactuate the Paper Feed Sensor. **The voltage changes by approximately 2 VDC.**

Y N
A B C

A

B

C

There is +5 VDC from CND-3 to CND-2 on the Lower PWB.

Y

N

Replace the Lower PWB (REP 1.6) (PL 1.3).

Go to Flag 1. Check the wires for an open circuit. If the wires are good, replace the Tray 1 Position Sensor. If the problem continues, replace the Lower PWB (PL 1.3).

Go to Flag 2. Check the wire for an open circuit. If the wire is good, replace the Main PWB (REP 1.5) (PL 1.2).

Remove Tray 1. Block the Tray 1 Position Sensor that is located at the rear of the Tray 1 opening and observe the adjacent gear. Switch the copier off and switch it on. **The gear rotates.**

Y N

Disconnect CND from the Lower PWB. Enter [8-2] and press the Start button. **The voltage from CND-4 to the copier frame and from CND-5 to the copier frame is 11 VAC.**

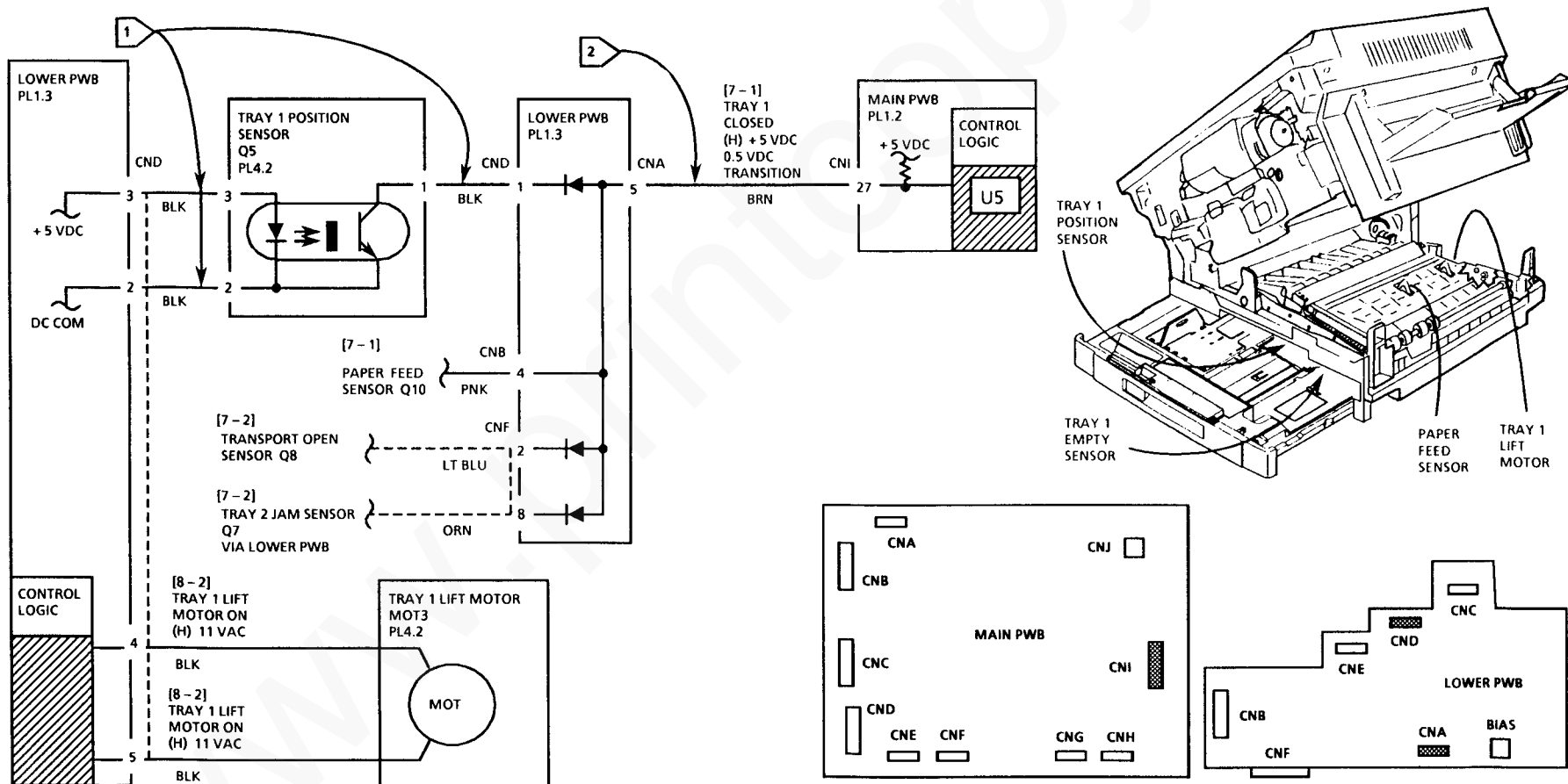
Y

N

Ensure that the correct value is loaded in [20-16] (Configuration Codes in General Procedures in Section 6). If the problem continues, replace the Lower PWB (PL 1.3).

Replace the Tray 1 Lift Motor (REP 7.5 for the assembly) (PL 4.2).

Go to the OF 7.1 Tray 1 Paper Indicator RAP.



U6 RAP

The control logic senses that the memory has a communications fault.

PROCEDURE

Enter [20-96]. The U6 code is still present.

Y

N

Check the following:

- The Transfer/Detack corotron and electrical connections are clean (REP 9.1, 9.4).
- The electrical contacts on the HVPS are clean.
- The connectors on the Input Power PWB, Main PWB, and the Lower PWB are secure.
- The connectors on the Power Switch, Interlock Switch, and front end of the Fuser are secure.
- The harnesses to the Control Console and the Copy Cartridge are secure.

Check all the connectors on the Main PWB are connected securely.

If the problem continues, replace the Main PWB (REP 1.5) (PL 1.2).

U7 RAP

The control logic senses that the SDF Document Glass is overheated.

INITIAL ACTION

Ensure that the vents at the rear of the copier are free from obstruction.

PROCEDURE

Enter [5-1]. Open and close the SDF. The SDF Jam lamp switches on and off.

Y N
Go to the OF 5.1 SDF RAP.

Enter [5-5] and press the Start button. The Optics Cooling Fan (SDF) energizes.

Y N
Go to the OF 1.3, Cooling Fan(s) RAP.

Switch the copier off. Disconnect CND from the SDF PWB. There is 12k ohms between pin 1 and pin 2 of CND on the harness.

Y N
Go to Flag 1 and Flag 2. Check the wires for an open circuit. If the wires are good, replace the SDF Document Glass Overheat Thermistor (PL 8.2).

Open the SDF to allow the thermistor to cool. There is less than 1k ohms between pin 1 and pin 2 of CND on the harness.

Y N
A B

A
Y

B
N

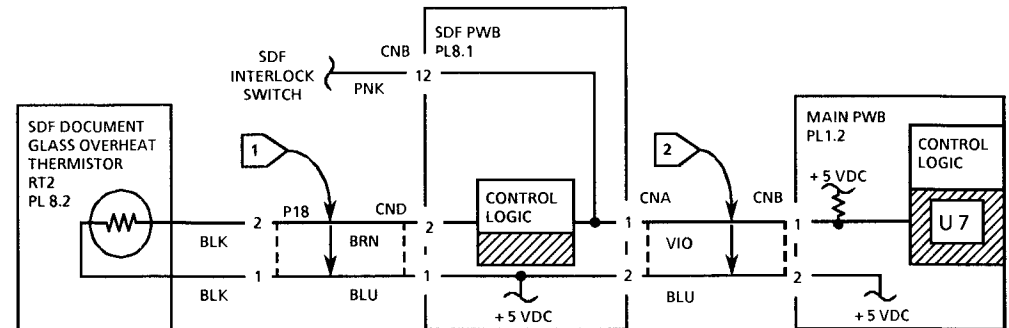
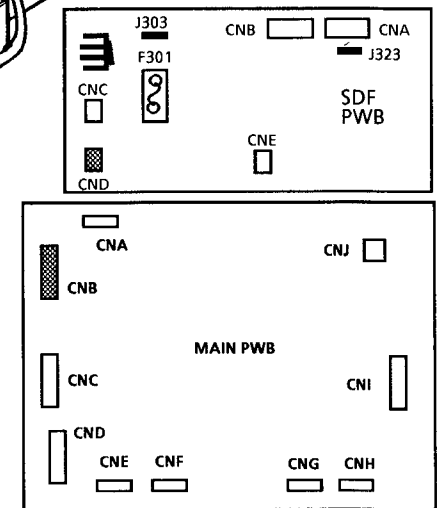
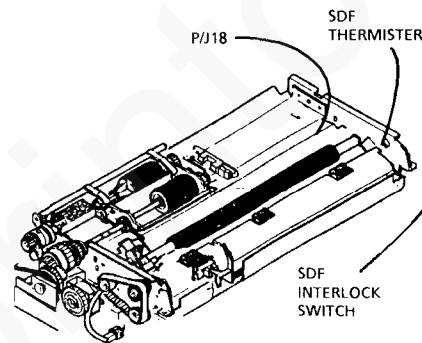
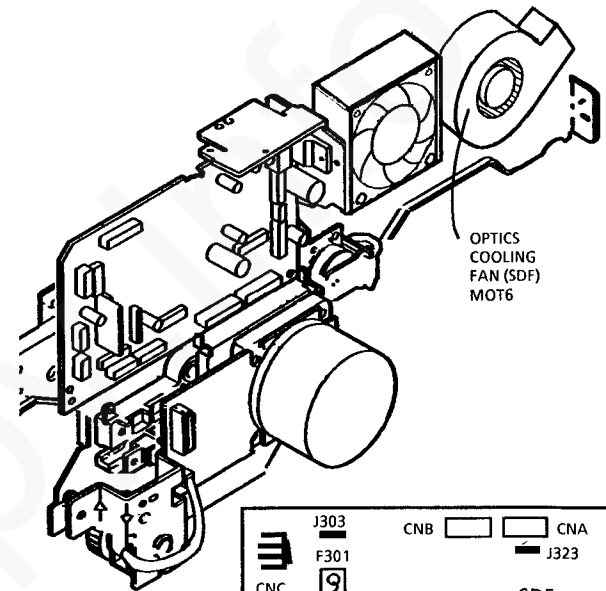
Check that the cooling ducts for the Optics Cooling Fan (SDF) are connected and are unobstructed (PL 3.1A).

If no problems are found, go to Flag 1 and Flag 2 and check the wires for an open circuit or a short circuit to the copier frame.

If the wires are good, replace the SDF Document Glass Overheat Thermistor (PL 8.2).

If the problem continues, replace Main PWB (REP 1.5) (PL 1.2).

Replace the SDF Document Glass Overheat Thermistor (PL 8.2).



U8 RAP

The control logic senses a problem with the source of power that is supplied by the customer, or the Auto Exposure Sensor did not detect light at the appropriate time.

INITIAL ACTION

Ensure that the underside of the SDF or Document Cover is clean.

PROCEDURE

The U8 was declared while performing ADJ 6.1 Exposure Level.

Y	N
	There is +24 VDC from CNJ-1 on the Main PWB to the copier frame.
Y	N
	There is +24 VDC from CNE-5 on the Input Power PWB to the copier frame.
Y	N
	Go to the OF 1.1 AC Power RAP.
	Go to Flag 2. Repair the open circuit.
	Ensure that the Document Cover or the SDF is closed. Enter [20-5] and press the Start button twice. A U8 status code is displayed.
A	N
B	Y
	C

A

B

C

If the Exposure Lamp does not illuminate, go to the OF 6.2 Exposure Lamp RAP.

If the Exposure Lamp illuminates briefly, go to Flag 1. Check the wires for an open circuit or a short circuit to the copier frame.

If the wires are good, replace the Auto Exposure Sensor (PL 3.1A).

If the problem continues, replace the Main PWB (REP 1.5) (PL 1.2).

Record the value in the display. Register a document with more text and close the SDF or Document Cover. Press the Start button again. Record the value that is displayed a few seconds after the Exposure Lamp deenergizes. During this part of the checkout, if a U8 is displayed, the document is too dark. Use a document with less text. The two recorded values are different.

Y N

Go to Flag 1. Check the wires for an open circuit or a short circuit to the copier frame. If the wires are good, replace the Auto Exposure Sensor (PL 3.1A). If the problem continues, replace the Main PWB (REP 1.5) (PL 1.2).

D

E

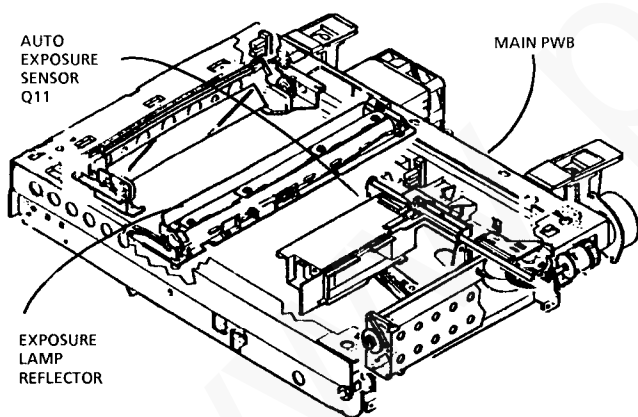
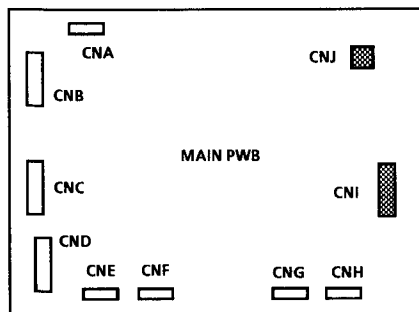
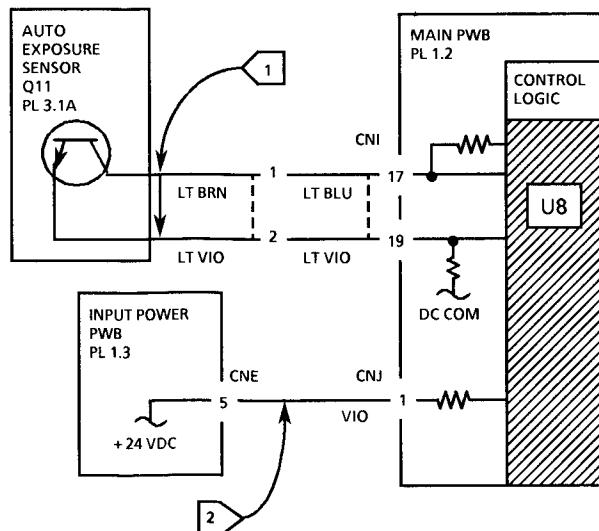
D

E

The Auto Exposure sensor is working. Connect the copier power cord to another power source.

Perform the following until the problem is resolved.

- Enter [6-4] and press the Start button. If the Exposure Lamp does not illuminate, go to the OF 6.2 Exposure Lamp RAP.
- Clean the mirrors and the Auto Exposure Sensor.
- Go to Flag 1. Check the circuit of the Auto Exposure Sensor for an intermittent short circuit or open circuit.
- Ensure that the Exposure Lamp Reflector is in position (PL 3.3).
- Ensure that the mirrors are in position (PL 3.3, 3.4, 3.5).
- Replace the Auto Exposure Sensor (PL 3.1A).
- Replace the Main PWB (REP 1.5) (PL 1.2).



U9 RAP

The control logic senses that there is no Developer during the auto developer setup.

PROCEDURE

If no Developer Cartridge is present, install a new Developer Cartridge (PL 5.2A).

If the Developer Cartridge is present, ensure developer is present in the Developer Material Inspection (REP 9.7).

If no developer is present, replace the Developer (REP 9.8) (PL 5.2A). If the problem continues, go to the OF 9.5, Dry Ink Sensor RAP.

OF 1.1, AC POWER RAP

INITIAL ACTION

- Ensure that the power source for the copier measures 115/220/240 VAC.
- Ensure that the tab that engages the interlock switch is not broken off of the Front Cover (PL 7.2). Ensure that the interlock switch is actuated when the Front Cover is closed.

PROCEDURE

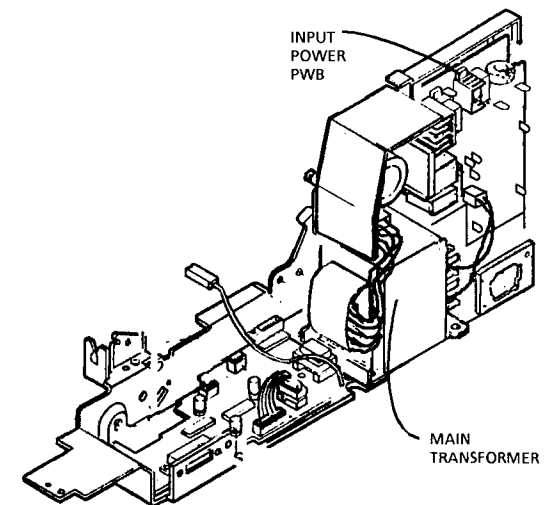
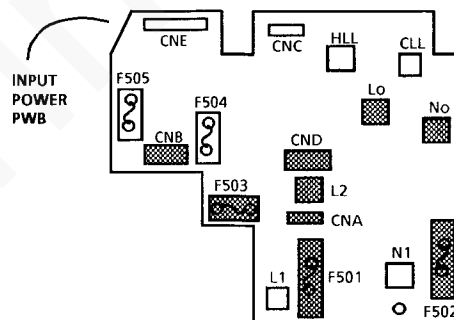
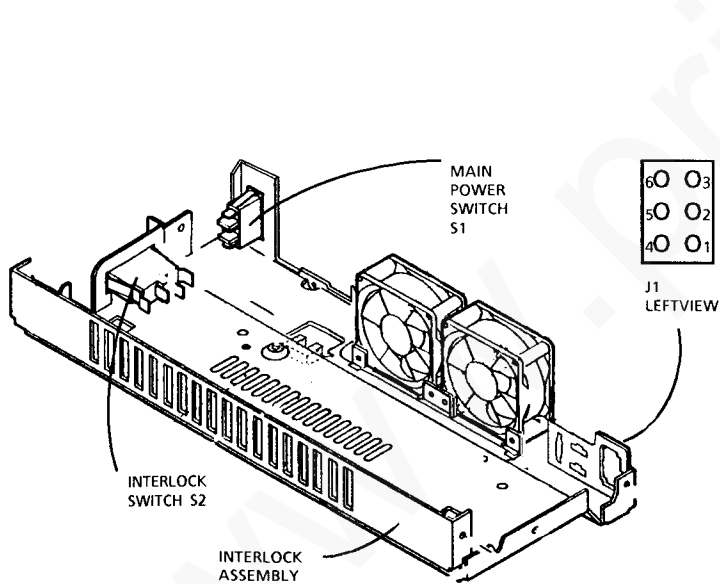
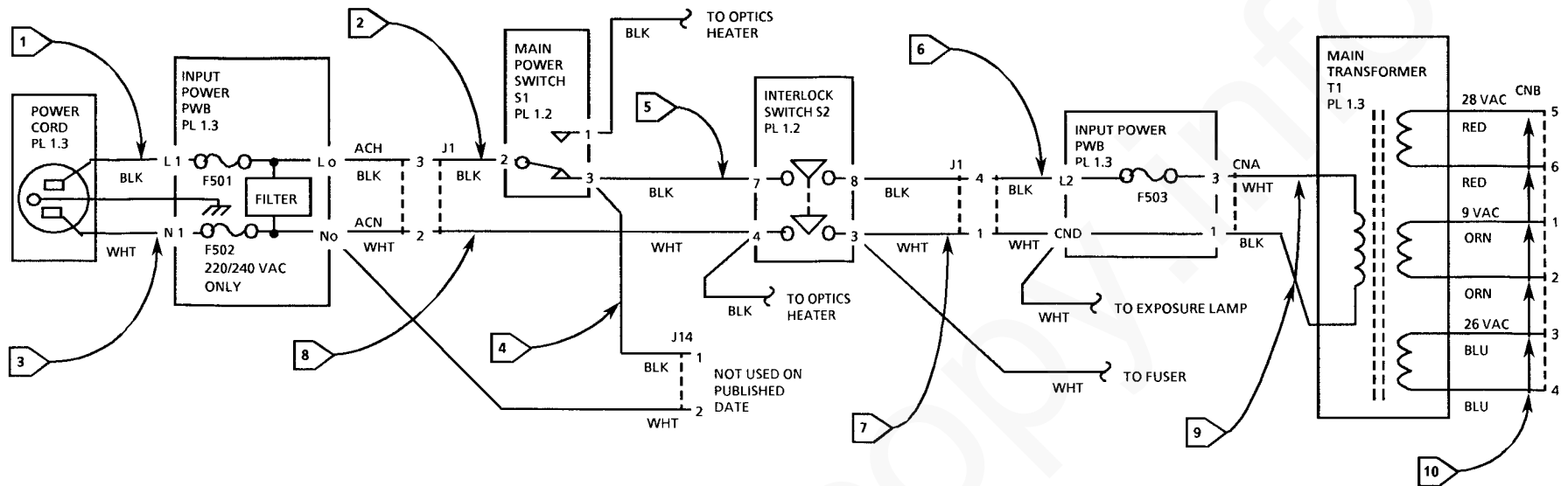
Ensure that the Front Cover is closed or that the Interlock Switch is cheated. Ensure that the copier is switched on. There is 115/220/240 VAC from L2 to either wire of CND on the Input Power PWB.

A **Y** **N**
There is 115/220/240 VAC from Lo to No on the Input Power PWB.
B **Y** **N**
Check the fuse F501 that is on the Input Power PWB. Check the fuse F502, if present, that is on the Input Power PWB. The fuses are good.
Y **N**
Replace the fuses (REP 1.8).
If a fuse blows again, go to Flags 2, 4, 5, 6, 7, 8, and 9 and check the wires for a short circuit to the copier frame.
Go to Flags 1 and 3. Check the wires, L1 and N1 on the Input Power PWB, and the power cord (PL 1.3) for an open circuit or a short circuit to the copier frame.

A **Y** **N**
There is 115/220/240 VAC from pin 3 on the Main Power Switch to No on the Input Power PWB.
B **Y** **N**
Go to Flag 2. Check the wire for an open circuit. Also, check the connection at pin 2 of the Main Power Switch.
If no problems are found, replace the Main Power Switch (REP 1.1) (PL 1.2).
Go to Flags 5, 6, 7, and 8. Check the wires for an open circuit.
If the wires are good, replace the Interlock Switch (REP 1.3) (PL 1.2).
There is 115/220/240 VAC from CNA-3 to CNA-1 on the Input Power PWB.
Y **N**
Check the fuse F503 that is on the Input Power PWB. The fuse is good.
Y **N**
Replace the fuse (REP 1.8).
If the fuse blows again, go to Flags 9 and 10 and check the wires for a short circuit.
If the wires are good, replace the Main Transformer (REP 1.4) (PL 1.3).
Check the connections L2 and CND that are on the Input Power PWB.
If no problems are found, replace the Input Power PWB (PL 1.3).

C
Check the voltages from CNB-5 to CNB-6, from CNB-1 to CNB-2, and from CNB-3 to CNB-4 on the Input Power PWB for the voltages that are shown on the circuit diagram. The voltages are present.
Y **N**
Go to Flags 9 and 10. Check the wires for an open circuit. Also, check the connections CNA and CNB.
If no problems are found, replace the Main Transformer (REP 1.4) (PL 1.3).

Go to the OF 1.2, DC Power Entry RAP.



OF 1.2 DC POWER ENTRY RAP

INITIAL ACTION

- If the problem occurs intermittently, check that the pins in connectors CNI, CNH, and CNB on the Main PWB, and CNE on the Input Power PWB are not broken. Check that the wires do not push out of the plug when they are connected to the PWB. Check that they are connected securely.

PROCEDURE

There is + 5 VDC from JP-1 on the Main PWB to the copier frame.

Y N
There is 9 VAC between CNB-1 and CNB-2 on the Input Power PWB.
Y N
Go to the OF 1.1 AC Power RAP.
There is 0 VAC across the fuse F505 on the Input Power PWB (the fuse is good).
Y N
Switch the copier off. Replace the fuse (REP 1.8). Switch on the copier. There is 0 VAC across the fuse F505 (the fuse is good).
Y N
There may be a short circuit in the + 5 VDC distribution. Go to Flag 3 and check the wire for a short circuit to copier frame. If the wire is good, go to the OF 1.3 + 5 VDC RAP.

A B C

A B C
There was an intermittent short circuit.
If the problem continues, go to Flag 3 and check the wire for a short circuit to copier frame. If the wire is good, go to the OF 1.3 + 5 VDC RAP.

There is + 12 VDC from CNE-7 to CNE-8 on the Input Power PWB.

Y N
Replace the Input Power PWB (REP 1.2) (PL 1.3).

There is + 12 VDC from CNJ-3 to CNJ-6 on the Main PWB.

Y N
Go to Flag 3 and Flag 4 and check the wires for an open circuit.

Replace the Main PWB (REP 1.5) (PL 1.2).

There is + 32 VDC from CNI-25 on the Main PWB to the copier frame, CNI-26 to the copier frame, and CNI-28 to the copier frame.

Y N
There is 28 VAC between CNB-5 and CNB-6 on the Input Power PWB.

Y N
Go to the OF 1.1 AC Power RAP.

There is 0 VAC across the fuse F504 on the Input Power PWB (the fuse is good).

Y N
E F

D

D E F
Switch the copier off. Replace the fuse F504 (REP 1.8). Switch the copier on. There is 0 VAC across the fuse F504 (the fuse is good).

Y N
There may be a short circuit in the + 32 VDC or + 24 VDC power distribution. Switch off the copier power. Replace the fuse F504 (REP 1.8). Go to Flag 1 and check the wire for a short circuit to copier frame or DC common. If the wire is good, remove pins 25, 26, and 28 from connector CNI. Connect CNI. Switch the copier on. There is 0 VAC across the fuse F504 (the fuse is good).

Y N
Go to the OF 1.4 + 24 VDC RAP.

Reinstall pins 25, 26, and 28 in connector CNI. Go to the OF 1.5 + 32 VDC RAP.

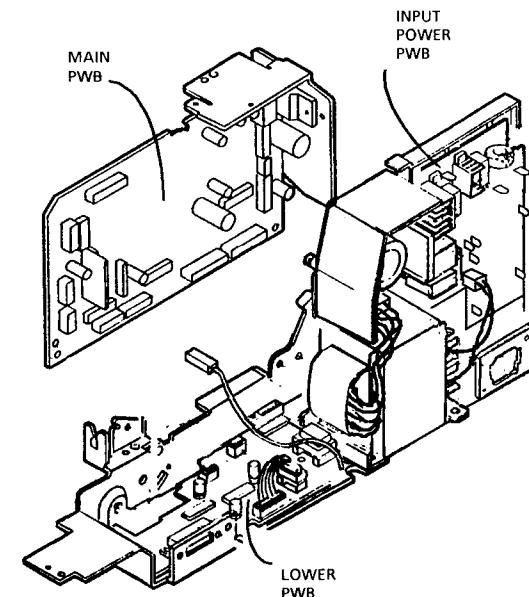
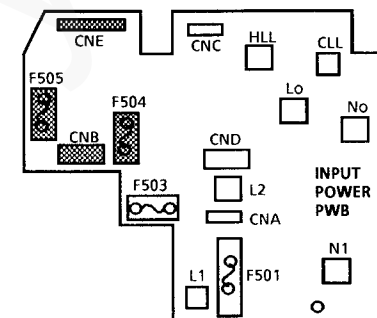
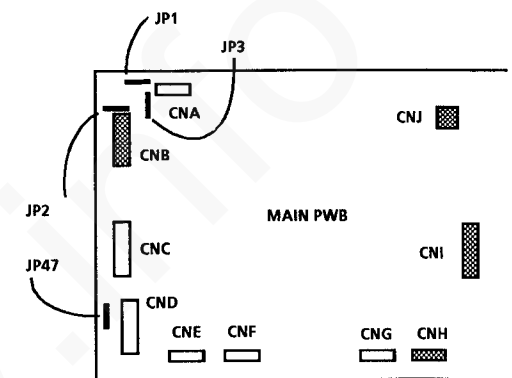
D E G

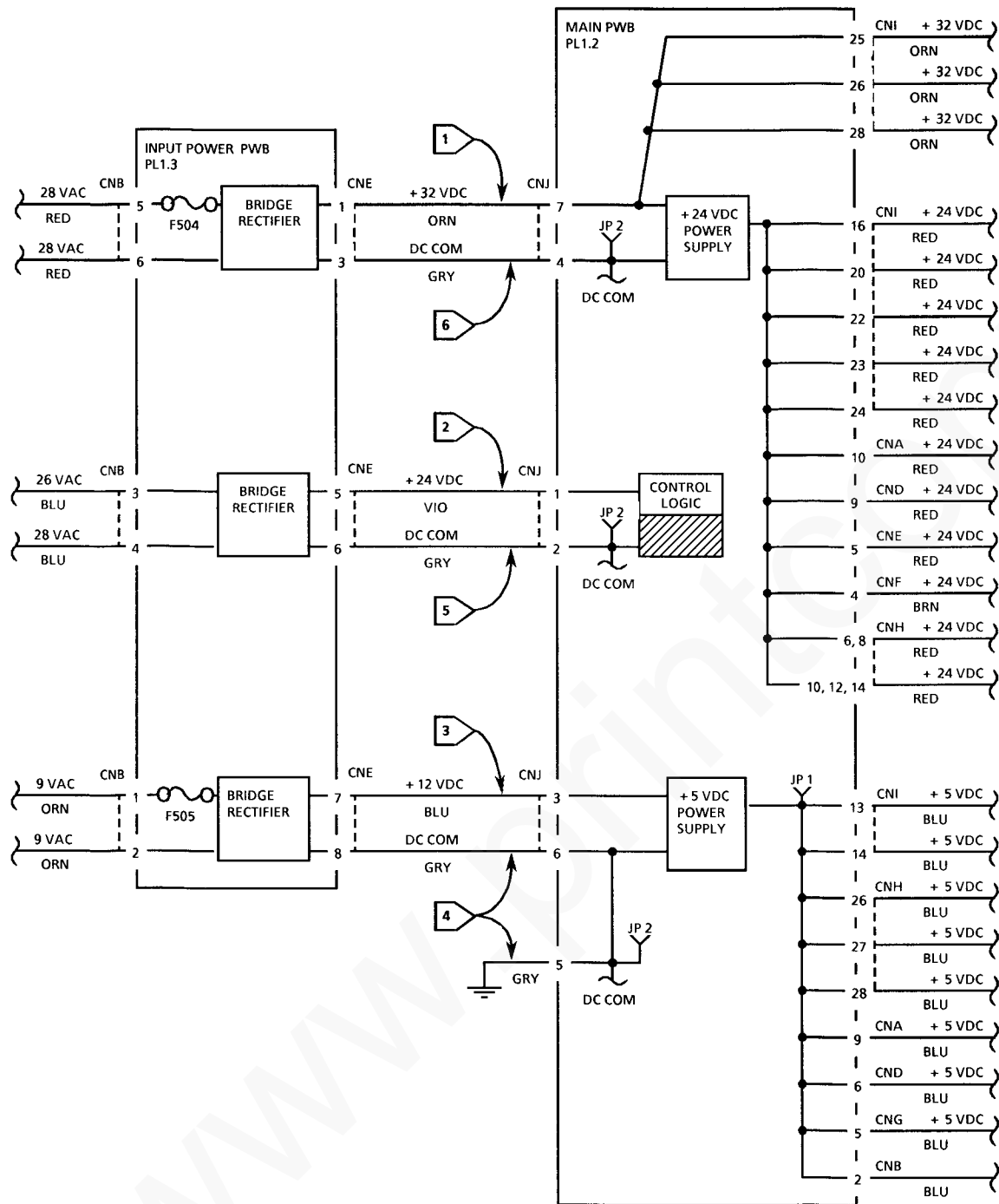
D
G

E
G

There was an intermittent short circuit.
If the problem continues, switch off the copier power. Go to Flag 1 and check the wire for a short circuit to copier frame. If the wire is good and the problem continues, remove pins 25, 26, and 28 from connector CNI. Connect CNI. Switch the copier on. There is 0 VAC across the fuse F504 (the fuse is good).
Y N
Go to the OF 1.4 +24 VDC RAP.
Go to the OF 1.5 +32 VDC RAP.
There is +32 VDC from CNE-1 on the Input Power PWB to the copier frame.
Y N
Replace the Input Power PWB (REP 1.2) (PL 1.3).
There is +32 VDC from CNJ-7 to CNJ-4 on the Input Power PWB.
Y N
Go to Flag 1 and Flag 6 and repair the open circuit.
Replace the Main PWB (REP 1.5) (PL 1.2).

There is 26 VAC between CNB-3 and CNB-4 on the Input Power PWB.
Y N
Go to the OF 1.1 AC Power RAP.
There is +24 VDC from CNE-5 on the Input Power PWB to the copier frame.
Y N
Replace the Input Power PWB (REP 1.2) (PL 1.3).
There is +24 VDC from CNJ-1 on the Main PWB to the copier frame.
Y N
Go to Flag 2. Check the wire for an open circuit.
There is +5 VDC from JP1 to JP2 on the Main PWB.
Y N
Go to Flag 4. Check the wires for an open circuit.
Go to Flag 5 and Flag 6. Check the wires for an open circuit.





OF 1.3 + 5 VDC RAP

NOTE: This RAP is only used to find a short circuit. If the Main PWB cannot generate +5 VDC, the service documentation will direct diagnostic actions be performed in the OF 1.2 DC Power RAP. This will restore the +5 VDC to the Main PWB. If there is an open circuit between a component and the +5 VDC that is generated on the Main PWB, a fault code RAP or a OF RAP will identify the problem.

PROCEDURE

Switch off the copier power. Disconnect the following P/J's on the Main PWB:

CNA
CNB (if SDF is present)

CND
CNG
CNH
CNI

Disconnect the following P/J's on the Lower PWB:

CNB
CND
CNF (if Tray 2 is present)

If an SDF is present, disconnect the following P/J's on the SDF PWB.

CNA
CNB
CND
CNE

Ensure that fuse F505 on the Input Power PWB is good. Switch on the copier power. Check that there is +5 VDC from JP1 to JP2 on the Main PWB. If the voltage is not measured, go to Flag 15 and check that the wire is secure from the Main PWB to the copier frame. If the wire is good, replace the Main PWB (REP 1.5) (PL 1.2).

A

A

Connect CNA on the Main PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N

Go to Flag 1. Check the wires for a short circuit to copier frame.

Connect CND on the Main PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N

Go to Flag 2. Check the wires for a short circuit to copier frame.

Connect CNG on the Main PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N

Go to Flag 3. Check the wires for a short circuit to copier frame.

Connect CNH on the Main PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N

Go to Flag 4. Check the wires for a short circuit to copier frame.

Connect CNI on the Main PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N

Go to Flag 5. Check the wires for a short circuit to copier frame. If the wires are good, replace the Lower PWB (REP 1.6) (PL 1.3).

Connect CNA on the Lower PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N

Replace the Lower PWB (REP 1.6) (PL 1.3).

B

B

Connect CNB on the Lower PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N

Go to Flag 7. Check the wires for a short circuit to copier frame.

Connect CND on the Lower PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N

Go to Flag 8. Check the wires for a short circuit to copier frame.

The copier has a SDF.

Y N

The copier has a Tray 2.

Y N

Go to Flag 13 and Flag 15 and check the wires for an open circuit.

Connect CNF on the Lower PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N

Go to Flag 9. Check the wires for a short circuit to copier frame.

Go to Flag 13 and Flag 15 and check the wires for an open circuit.

Connect CNB on the Main PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N

Go to Flag 6. Check the wires for a short circuit to copier frame.

C

C
Connect CNA on the SDF PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N
Replace the SDF PWB (PL 8.1).

Connect CNB on the SDF PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N
Go to Flag 10. Check the wires for a short circuit to copier frame.

Connect CND on the SDF PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N
Go to Flag 11. Check the wires for a short circuit to copier frame.

Connect CNE on the SDF PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N
Go to Flag 12. Check the wires for a short circuit to copier frame.

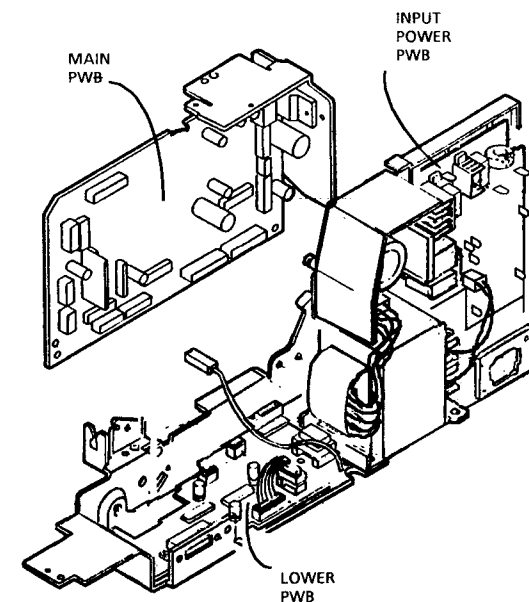
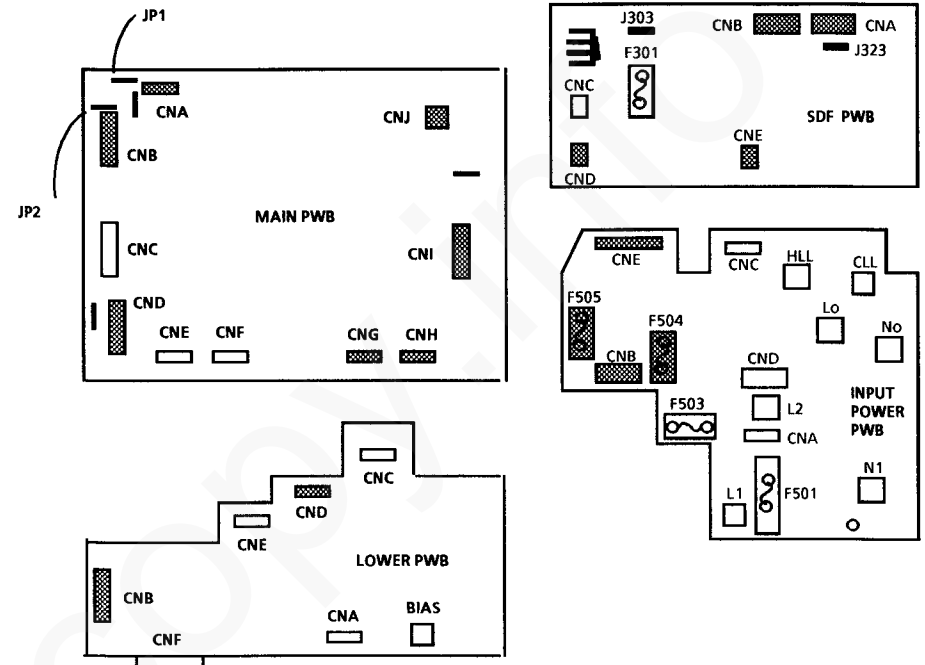
The copier has a Tray 2.

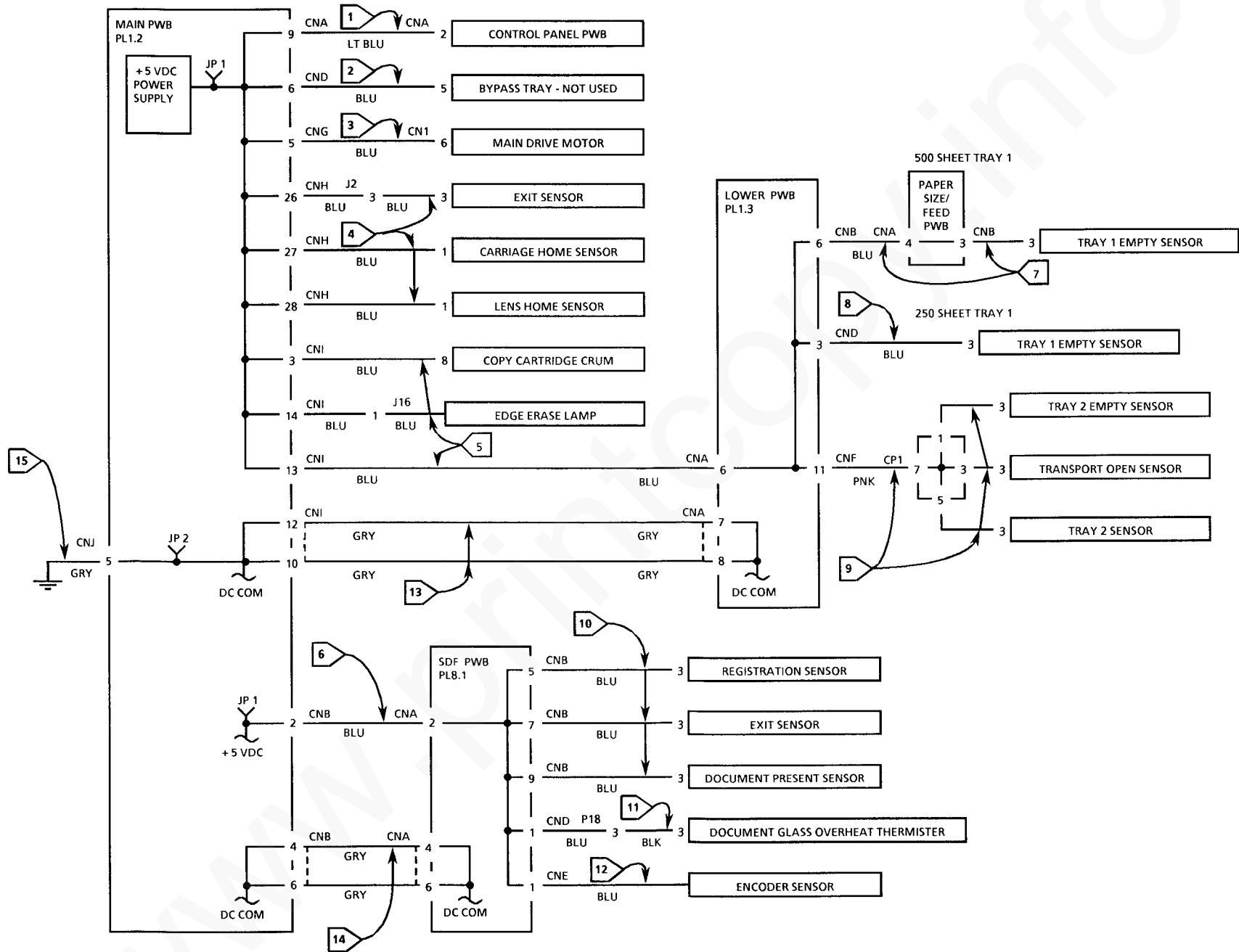
Y N
Go to Flag 13, Flag 14, and Flag 15 and check the wires for an open circuit.

Connect CNF on the Lower PWB. There is +5 VDC from JP1 to JP2 on the Main PWB.

Y N
Go to Flag 9. Check the wires for a short circuit to copier frame.

Go to Flag 13, Flag 14, and Flag 15 and check the wires for an open circuit.





OF 1.4 + 24 VDC RAP

NOTE: This RAP is only used to find a short circuit in the +24 VDC power distribution. If the Main PWB cannot generate +24 VDC, the service documentation will direct diagnostic actions be performed in the OF 1.2 DC Power Entry RAP. This will restore the +24 VDC to the Main PWB. If there is an open circuit between a component and the +24 VDC that is generated on the Main PWB, a fault code RAP or an OF RAP will identify the problem.

PROCEDURE

Switch off the copier power. Disconnect the following P/J's on the Main PWB:

CNA

CNB (if SDF is present)

CND

CNE

CNF

CNG

CNH

CNI

Disconnect the following P/J's on the Lower PWB:

CNA

CNB

CNE

CNF (if Tray 2 is present)

If an SDF is present, disconnect the following P/J's on the SDF PWB.

CNA

CNB

Ensure that fuse F504 on the Input Power PWB is good. Switch on the copier power. Check that there is +24 VDC from JP43 to JP2 on the Main PWB. If the voltage is not measured, go to Flag 20. Check the wire is secure from the Main PWB to the copier frame. If the wire is good, replace the Main PWB (REP 1.5) (PL 1.2).

A

A

Connect CNI on the Main PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N

Go to Flag 1, Flag 2, and Flag 4. Check the wires for a short circuit to copier frame or DC common.

Connect CNA on the Main PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N

Go to Flag 5 and Flag 6. Check the wires for a short circuit to copier frame or DC common.

Connect CND on the Main PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N

Go to Flag 7 and Flag 8. Check the wires for a short circuit to copier frame or DC common.

Connect CNE on the Main PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N

Go to Flag 9. Check the wire for a short circuit to copier frame or DC common.

Connect CNG on the Main PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N

Go to Flag 11 and Flag 12. Check the wires for a short circuit to copier frame or DC common.

Connect CNH on the Main PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N

Go to Flag 13. Check the wires for a short circuit to copier frame or DC common.

B

B

Connect CNA on the Lower PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N

Go to Flag 4. Check the wire for a short circuit. If the wire is good, replace the Lower PWB (REP 1.6) (PL 1.3).

Connect CNB on the Lower PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N

Go to Flag 15. Check the wire for a short circuit to copier frame or DC common.

Connect CNE on the Lower PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N

Go to Flag 16. Check the wire for a short circuit to copier frame or DC common.

The copier has a SDF.

Y N

The copier has a Tray 2.

Y N

Go to Flag 13 and Flag 15 and check the wires for an open circuit.

Connect CNF on the Lower PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N

Go to Flag 17. Check the wire for a short circuit to copier frame or DC common.

Go to Flag 18, Flag 19, and Flag 20 and check the wires for an open circuit.

C

C Connect CNA on the SDF PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N
Go to Flag 3. Check the wire for a short circuit to copier frame or DC common. If the wire is good, replace the SDF PWB (PL 8.1).

Connect CNB on the SDF PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N
Go to Flag 14. Check the wires for a short circuit to copier frame or DC common.

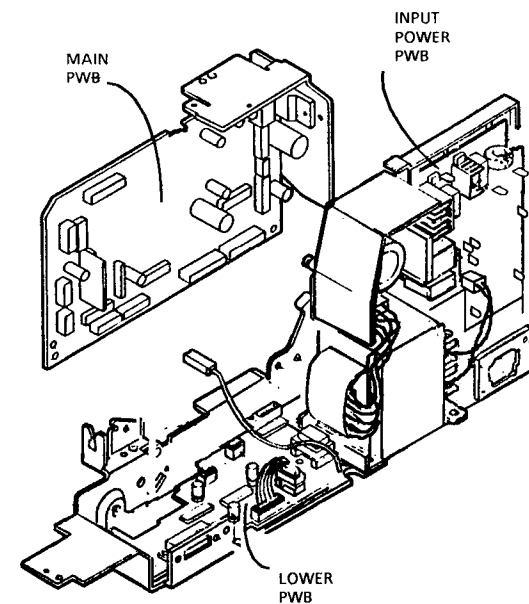
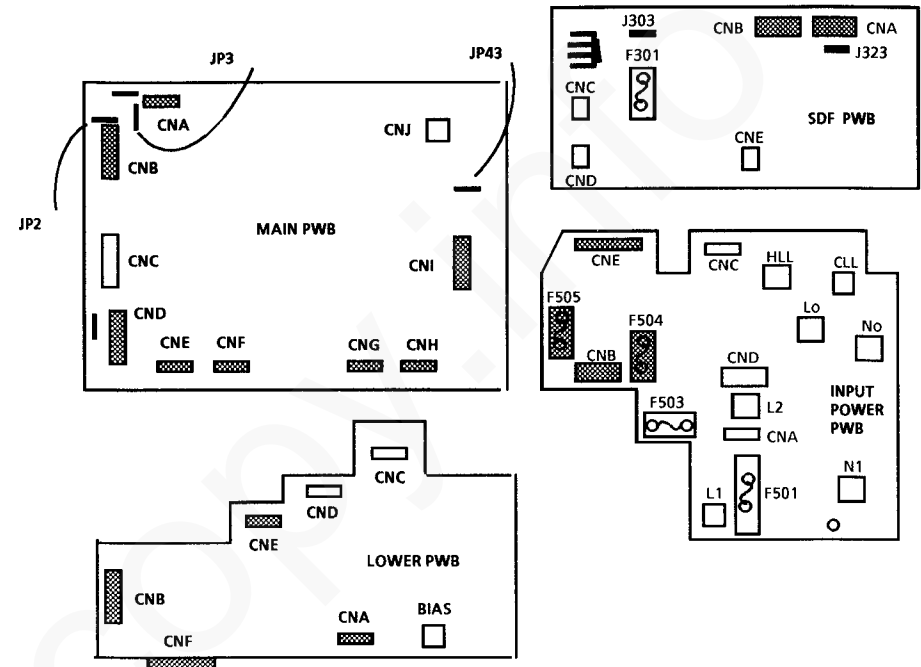
The copier has a Tray 2.

Y N
Go to Flag 13 and Flag 15 and check the wires for an open circuit.

Connect CNF on the Lower PWB. There is +24 VDC from JP43 to JP2 on the Main PWB.

Y N
Go to Flag 17. Check the wires for a short circuit to copier frame or DC common.

Go to Flag 18, Flag 19, and Flag 20. Check the wires for an open circuit.



OF 1.5 + 32 VDC RAP

NOTE: This RAP is only used to find a short circuit in the + 32 VDC power distribution. If the Main PWB cannot generate + 32 VDC, the service documentation will direct diagnostic actions be performed in the OF 1.2 DC Power Entry RAP. This will restore the + 32 VDC to the Main PWB. If there is an open circuit between a component and the + 32 VDC that is generated on the Main PWB, a fault code RAP or an OF RAP will identify the problem.

PROCEDURE

Switch off the copier power. Disconnect the following P/J's on the Main PWB:

CNB (if SDF is present)

CNC

CNG

CNI

Disconnect the following P/J's on the Lower PWB:

CNA

CNC

If an SDF is present, disconnect the following P/J's on the SDF PWB.

CNA

CNC

Ensure that fuse F504 on the Input Power PWB is good. Switch on the copier power. Check that there is + 32 VDC from CNI-25 to JP2 on the Main PWB, + 32 VDC from CNI-26 to JP2, and + 32 VDC from CNI-28 to JP2. If the voltages are not measured, go to Flag 1 and check that the wire is secure from the Main PWB to the copier frame. If the wire is good, replace the Main PWB (REP 1.5) (PL 1.2).

A

A

Connect CNI on the Main PWB. There is + 32 VDC from CNI-25 to JP2 on the Main PWB, + 32 VDC from CNI-26 to JP2, and + 32 VDC from CNI-28 to JP2.

Y N

Go to Flag 2, and Flag 3. Check the wires for a short circuit to copier frame or DC common.

Connect CNH on the Main PWB. There is + 32 VDC from JP47 to JP2.

Y N

Replace the Main PWB (REP 1.5) (PL 1.2).

Connect CNG on the Main PWB. There is + 32 VDC from JP47 to JP2.

Y N

Go to Flag 4. Check the wires for a short circuit to copier frame or DC common.

Connect CNC on the Main PWB. There is + 32 VDC from JP47 to JP2.

Y N

Go to Flag 5. Check the wires for a short circuit to copier frame or DC common.

Connect CNA on the Lower PWB. There is + 32 VDC from JP47 to JP2.

Y N

Replace the Lower PWB (REP 1.6) (PL 1.3).

Connect CNC on the Lower PWB. There is + 32 VDC from JP47 to JP2.

Y N

Go to Flag 7. Check the wire for a short circuit. If the wire is good, replace the High Voltage Power Supply.

B

B

The copier has a SDF.

Y N

Go to Flag 8 and Flag 9 and check the wires for an open circuit.

Connect CNB on the Main PWB. There is + 32 VDC from JP47 to JP2.

Y N

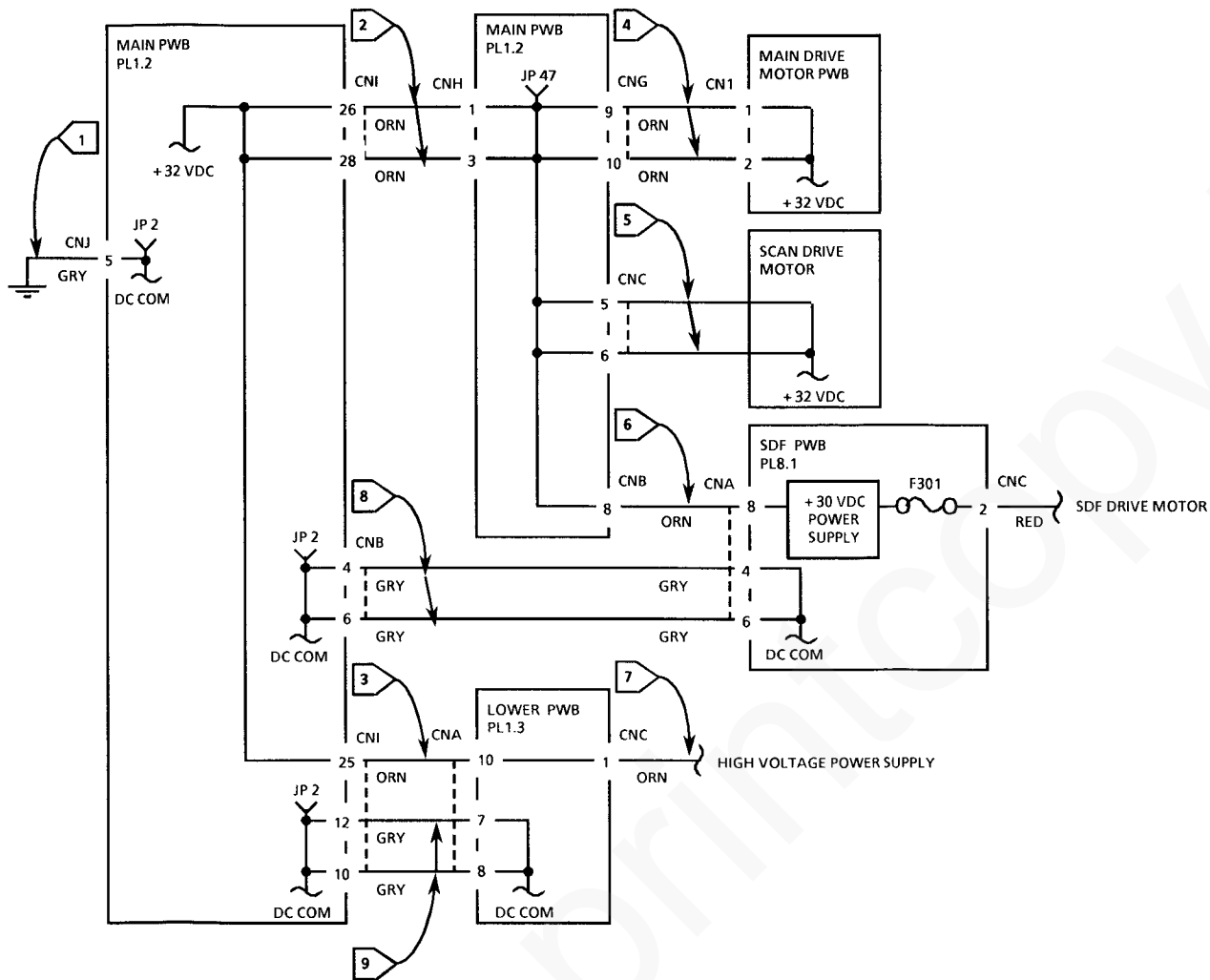
Go to Flag 6. Check the wire for a short circuit to copier frame or DC common.

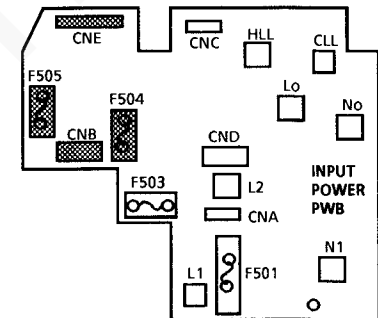
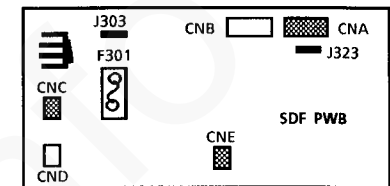
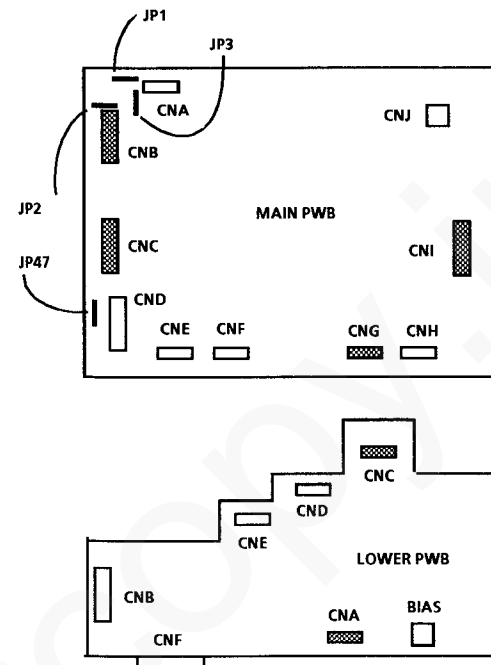
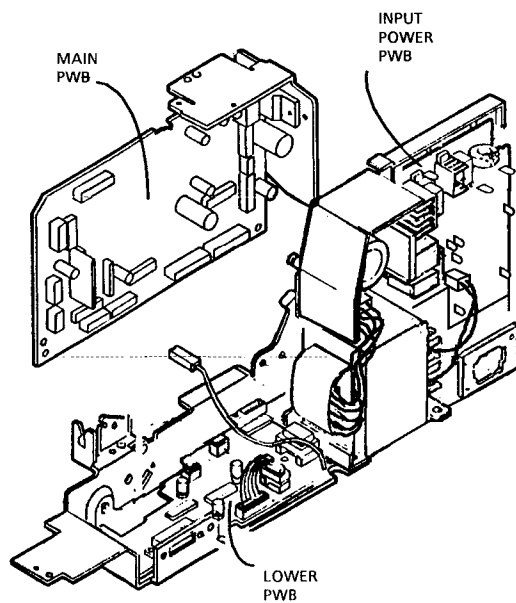
Connect CNA on the SDF PWB. There is + 32 VDC from JP47 to JP2.

Y N

Replace the SDF PWB (PL 1.3).

Go to Flag 8 and Flag 9 and check the wires for an open circuit.





OF 1.6 COOLING FANS RAP

Ensure that the interlock is cheated or the Front Cover is closed. One or more of the of the fans operates at high speed while the copier is in the standby mode.

Y	N	Enter [6 – 4]. Press the Start button. The Optics Cooling Fan energizes.
Y	N	Press the Stop button. There is + 24 VDC from CNH-5 on the Main PWB to the machine frame.
Y	N	There is + 24 VDC from CNH-6 on the Main PWB to the machine frame.
Y	N	Replace the Main PWB (REP 1.5) (PL 1.2).
Y	N	Go to Flag 3 and Flag 4. Check the wires for an open circuit. If the wires are good, replace the Optics Cooling Fan (PL 3.1B).
Y	N	Replace the Main PWB (REP 1.5) (PL 1.2).
Y	N	Press the Stop button. Fuser Cooling Fan MOT 8 operates at slow speed.
Y	N	There is + 24 VDC from CNH-12 to CNH-23 on the Main PWB to the machine frame.
Y	N	Replace the Main PWB (REP 1.5) (PL 1.2).

Y	N	Enter [10 – 2]. Press the Start button. Both of the Fuser Cooling Fans energize.
Y	N	Fuser Cooling Fan MOT 9 is energized.
Y	N	Press the Stop button. There is + 24 VDC from CNH-13 on the Main PWB to the machine frame.
Y	N	There is + 24 VDC from CNH-14 on the Main PWB to the machine frame.
Y	N	Replace the Main PWB (REP 1.5) (PL 1.2).
Y	N	Go to Flag 5 and Flag 6. Check the wires for an open circuit. If the wires are good, replace the Fuser Cooling Fan (PL 1.2).
Y	N	Replace the Main PWB (REP 1.5) (PL 1.2).

Y	N	Press the Stop button. There is + 24 VDC from CNH-13 on the Main PWB to the machine frame.
Y	N	There is + 24 VDC from CNH-14 on the Main PWB to the machine frame.
Y	N	Replace the Main PWB (REP 1.5) (PL 1.2).
Y	N	Go to Flag 5 and Flag 6. Check the wires for an open circuit. If the wires are good, replace the Fuser Cooling Fan (PL 1.2).
Y	N	Replace the Main PWB (REP 1.5) (PL 1.2).
Y	N	The copier has an SDF.
Y	N	The cooling fans are operating correctly. Ensure that the vents that are in the copier covers for the fans are free from obstructions. Refer to the space requirements in Section 6.
Y	N	Enter [5 – 5]. Press the Start button. The Optics Cooling Fan (SDF) energizes.
Y	N	Press the Stop button. There is + 24 VDC from CNH-15 on the Main PWB to the machine frame.
Y	N	

A **F** **G** **H**
Press the Stop button. There is +24 VDC from CNH-15 on the Main PWB to the machine frame.

Y **N**
Replace the Main PWB (REP 1.5) (PL 1.2).

Go to Flag 1 and Flag 2. Check the wires for an open circuit. If the wires are good, replace the Optics Cooling Fan (SDF) (PL 3.1A).

Replace the Main PWB (REP 1.5) (PL 1.2).

The cooling fans are operating correctly. Ensure that the vents that are in the copier covers for the fans are free from obstructions. Refer to the space requirements in Section 6.

The Optics Cooling Fan (SDF) operates at high speed while the copier is in the standby mode.

Y **N**
The Optics Cooling Fan operates at high speed while the copier is in the standby mode.

Y **N**
The Fuser Cooling Fan (MOT 9) operates at high speed while the copier is in the standby mode.

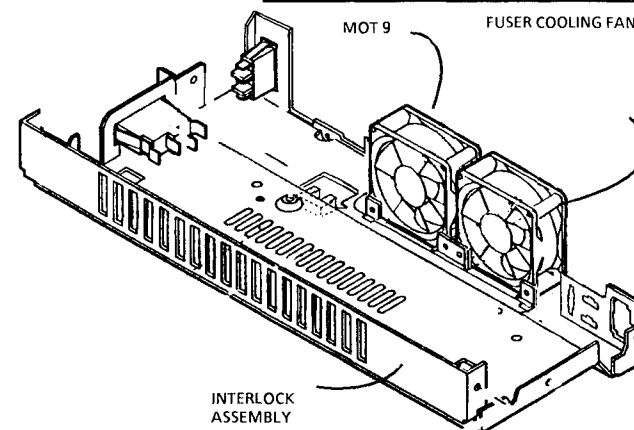
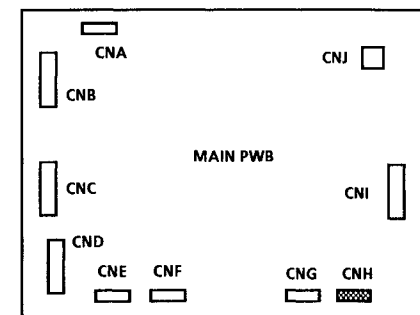
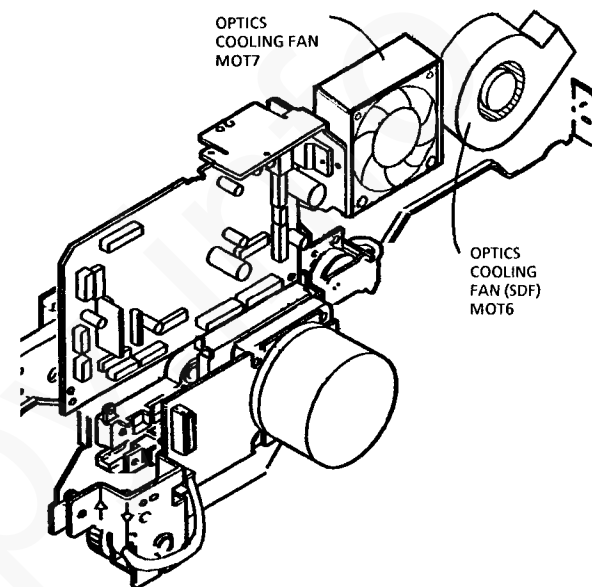
J **K** **L** **M**

J **K** **L** **M**
If the Slow Speed PWB is present, go to Flag 8 and repair the short circuit to copier frame or DC common. If the Slow Speed PWB is not present, go to Flag 11 and repair the short circuit to copier frame or DC common.

Go to Flag 5 and repair the short circuit to the copier frame or DC common.

Go to Flag 3 and repair the short circuit to the copier frame or DC common.

Go to Flag 1 and repair the short circuit to the copier frame or DC common.



OF 2.1 COPIER DISPLAY / DEAD COPIER RAP

- Ensure the power source for the copier measures 115/220/240 VAC.
- Ensure the tab on the Front Cover that actuates the Interlock Switch is present (PL 7.2).
- Ensure the Interlock Switch is actuated when the Front Cover is closed or cheat the interlock switch.

One of the Fuser Cooling fans is operating slowly.

Y N
Go to the OF 1.2, DC Power Entry RAP.

The Control Panel lights are flashing on and off.

Y N
There is +5 VDC from CNA-9 on the Main PWB to the copier frame.
Y N
Go to the OF 1.2, DC Power Entry RAP.

Switch off the copier. There is less than 0.5 ohms from CNA-5 on the Main PWB to the copier frame.

Y N
Go to the OF 1.2, DC Power Entry RAP.

A

B

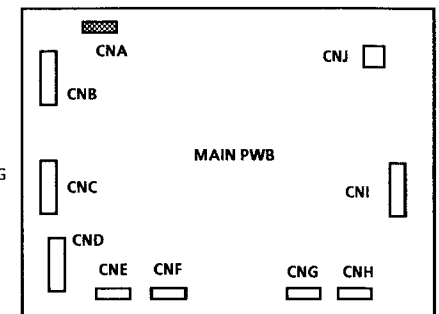
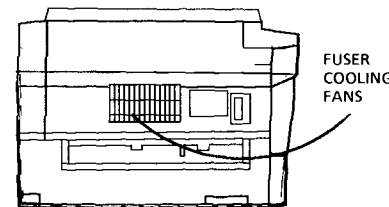
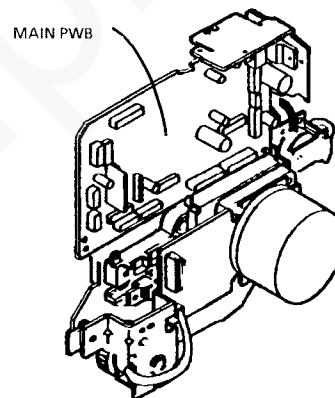
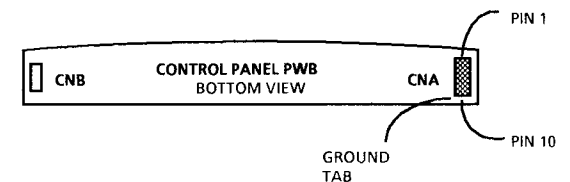
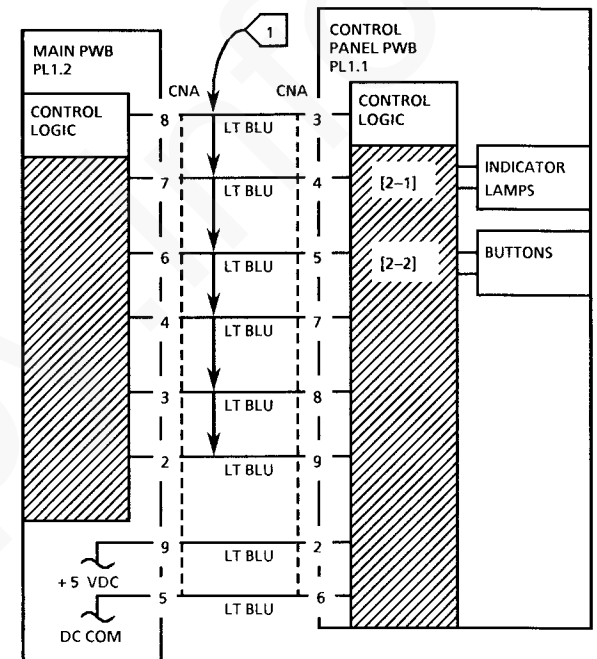
A

B

Check the following:

- Remove the Control Panel (REP 14.1) and check that the Ground Tab is installed on the PWB and touches the frame when the Control Panel is installed.
- Check that the gray ground wire is secured to the Ground Tab.
- Go to Flag 1. Check the wires for an open circuit or a short circuit.
- Enter [2-2] and actuate the control panel buttons. If any button does not operate, replace the Control Panel PWB (REP 1.7) (PL 1.1).
- If the problem continues, replace the Main PWB (REP 1.5) (PL 1.2).

Go to the OF 1.2, DC Power Entry RAP.



OF 3.1 COPIES PER MINUTE / SDF INTERLOCK RAP

The copier has an SDF.

Y N
Enter [6-6]. Open and close the Document Cover. The CRU lamp switches on and off.
Y N
Open the Document Cover. There is +5 VDC from CNB-1 on the Main PWB to the copier frame.
Y N
Go to Flag 3. Check the wires for an open circuit or a short circuit. If the wires are good, replace the Main PWB (REP 1.5) (PL1.2).
Close the Document Cover. There is 0 VDC from CNB-1 on the Main PWB to the copier frame.
Y N

- Ensure that all the shipping material is removed from the Document Cover.
- Ensure the Right Support and Counterbalance are not broken (PL 3.1B, 7.1).
- Check that the Magnet (PL 7.1) is present. It is located under the cover above the switch.
- Go to Flag 3. Check the wires for an open or short circuit. If the wires are good, replace the Document Cover Open Switch (PL 3.1B).

A

B

C

A

B

C

Replace the Main PWB (REP 1.5) (PL1.2).

Replace the Main PWB (REP 1.5) (PL1.2).

Enter [5-1]. Open and close the SDF. The SDF Jam lamp switches on and off.

Y

N

Disconnect CNB from the Main PWB. There is +5 VDC from CNB-1 on the Main PWB to the copier frame.

Y

N

Replace the Main PWB (REP 1.5) (PL1.2).

Disconnect CNB from the SDF PWB. Close the SDF. There is 0 ohms between CNB-12 and CNB-13 on the SDF harness.

Y

N

Go to Flag 1. Check the wires for an open circuit. If the wires are good, replace the SDF Interlock Switch (PL 8.1).

There is 0 ohms between CNB-12 and CNB-13 on the SDF harness.

Y

N

Replace the SDF PWB (PL 8.1).

Go to Flag 2. Check the wire for an open circuit or a short circuit. The wire is good.

Y

N

Repair the wire.

D

E

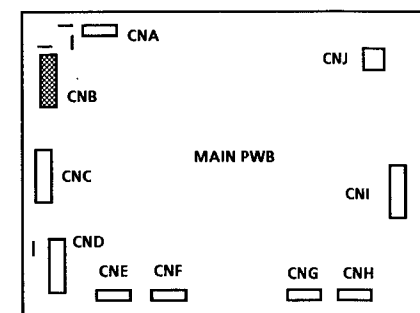
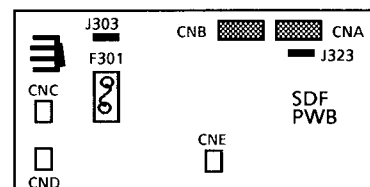
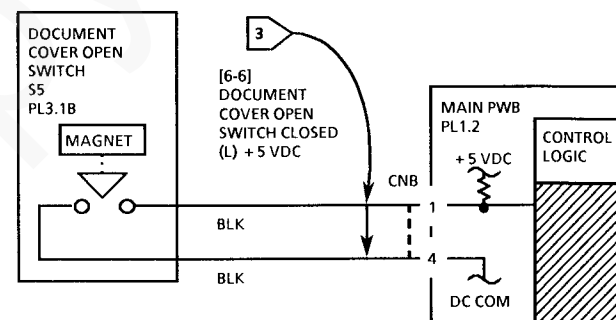
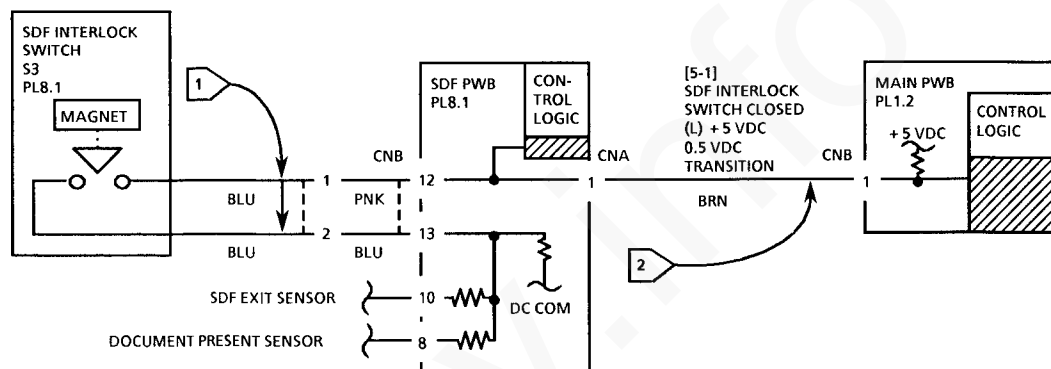
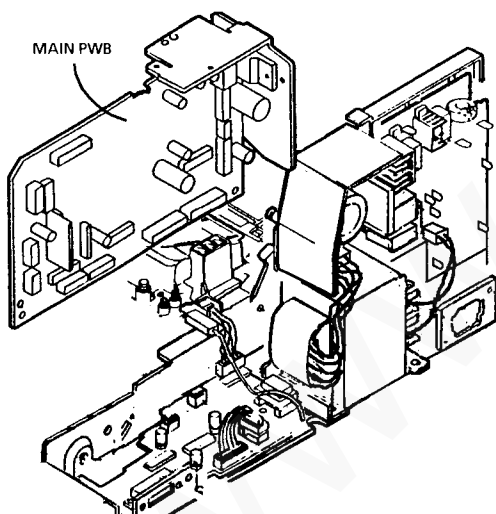
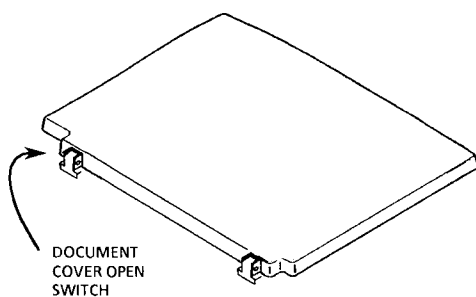
D

E

Perform the following:

- Check that the Magnet (PL 7.2) is present. It is located under the cover that is below the switch.
- Check that the SDF is aligned with the copier. Check that the Left Support and Counterbalance is not broken (PL 3.1B, PL 8.1).
- Ensure that the shipping material is removed from the SDF.
- Check that the correct value is stored in [20-16]. Refer to the Configuration Code chart in Section 6.
- Ensure that Tag 3 is installed.
- Ensure that the SDF Registration Guide is installed correctly (REP 5.10).

Go to the OF 5.1, SDF RAP.



OF 3.2 COPIER DEAD CYCLES / FCOT RAP

There is +5 VDC from CNA-6 on the Lower PWB to the machine frame.

Y **N**
Go to the OF 1.2 DC Power Entry RAP.

The problem occurs after copying documents with high solid area coverage, or solid area coverage that is 23% or higher (see Dry Ink Cartridge yield in Section 6).

Y **N**
Perform the following:

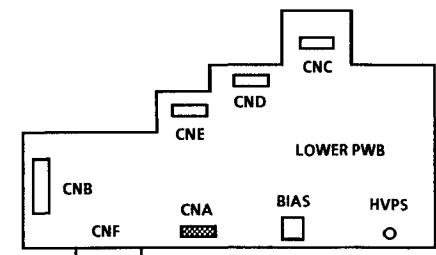
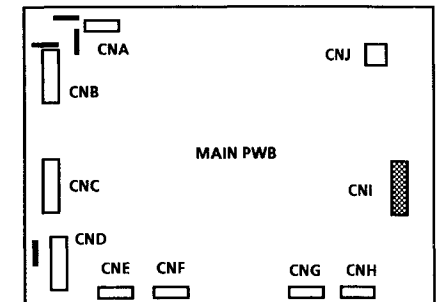
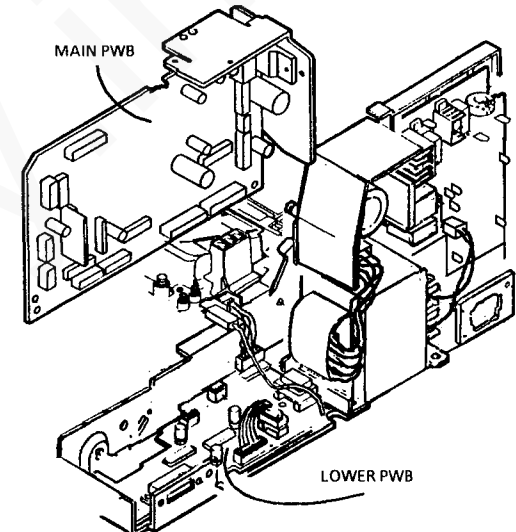
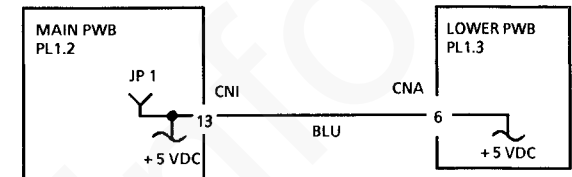
- Switch off the copier. Disconnect and connect the P/J's on the Main PWB and the Lower PWB.
- If the problem continues, go to the J1 RAP and return here if the problem continues.
- Go to the OF 3.3, Communications RAP.

The copier is stabilizing the Dry Ink concentration. The copier is designed to copy documents with up to 6% solid area coverage without requiring dead cycle time to stabilize the Dry Ink concentration. Open and close the Front Cover. The copier dead cycles (in the tone up mode) for more than 4 minutes.

Y **N**
Perform the following:

- Check that the Dry Ink Cartridge contains Dry Ink.
- Open and close the Front Cover and allow the copier to dead cycle.
- Repeat opening and closing the Front Cover once to allow the copier to operate in the dead cycle mode.
- Repeat this action again. The amount of dead cycle time should get smaller. Change Developer (REP 9.8) if the dead cycle time does not change.

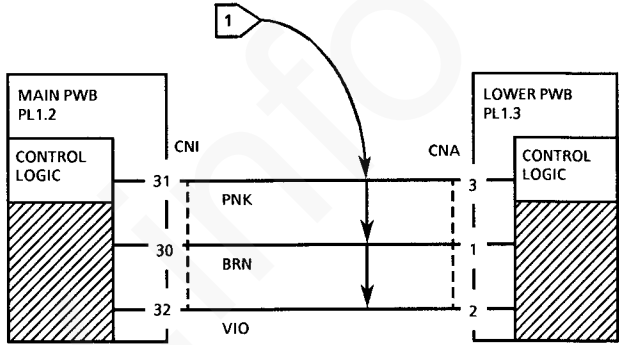
Go to the J1 RAP.



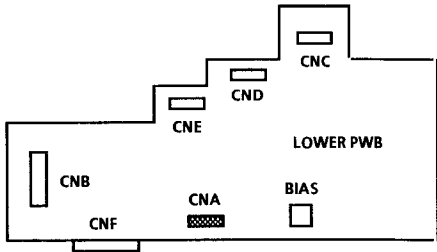
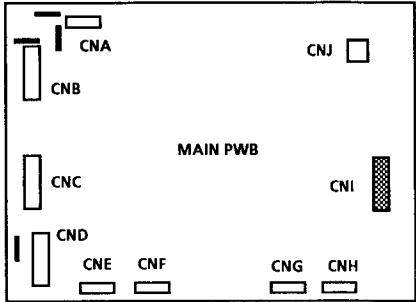
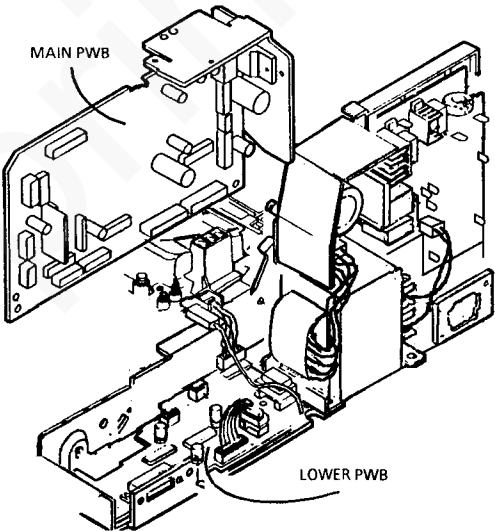
OF 3.3 COMMUNICATIONS RAP

PROCEDURE

Go to Flag 1. Check the wires for an open circuit or a short circuit. Check the voltages from the Main PWB to the copier frame for the voltages shown in the chart. If the correct voltages are not measured, replace the Main PWB (REP 1.5) (PL 1.2).



MAIN PWB PIN	VOLTAGE (VDC)		
	STAND BY	9 - 2	9 - 5
31	4.8	3.8	4.5
30	0.12	0.31	1.6
32	4.3	3.6	4.1



OF 3.4 COPY COUNTER RAP

There is +24 VDC from CNA-1 on the Main PWB to the machine frame.

Y N

There is +24 VDC from CNA-9 on the Main PWB to the machine frame.

Y N

Replace the Main PWB (REP 1.5) (PL 1.2).

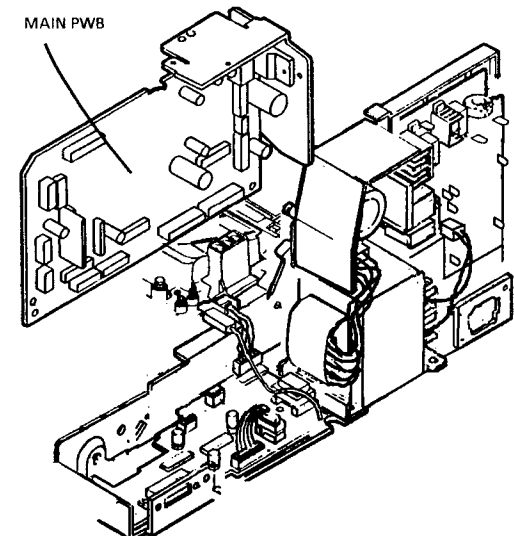
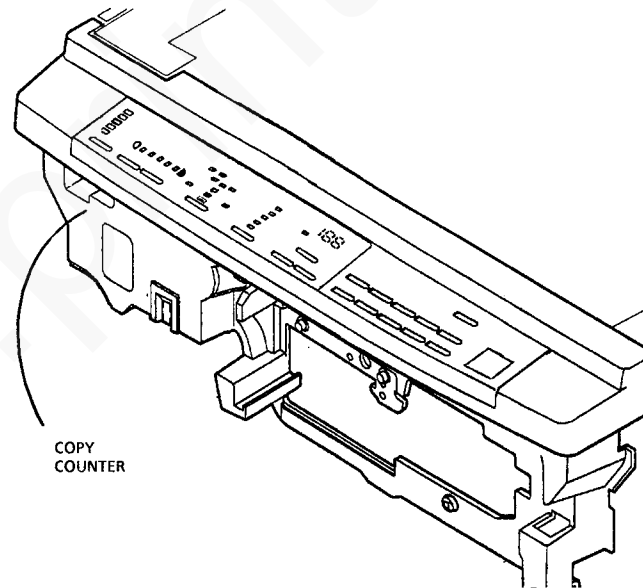
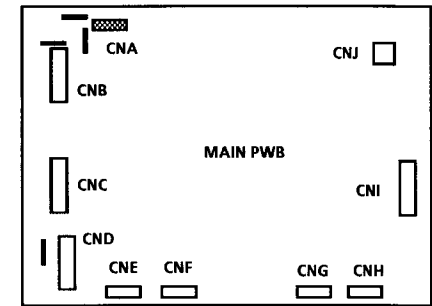
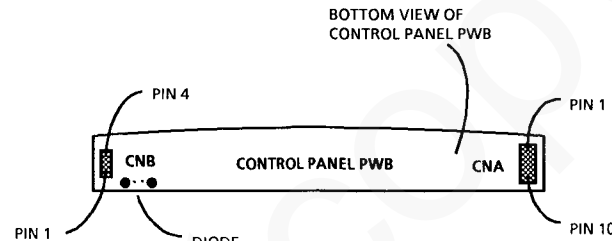
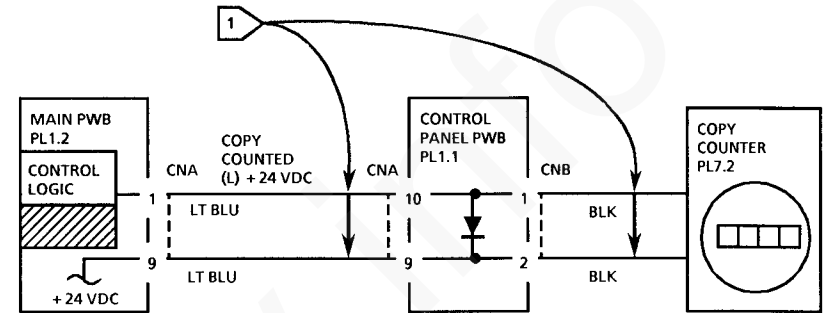
Go to Flag 1. Check the wires and the Control Panel PWB (REP 1.7) for an open circuit or short circuit to the copier frame. If the circuits are good, replace the Copy Counter (PL 7.2).

While measuring the voltage from CNA-1 on the Main PWB to the machine frame, press the Start button. The voltage momentarily goes to approximately 0 VDC after the Start button is pressed.

N

Replace the Main PWB (REP 1.5) (PL 1.2). Check the diode D407 that is on the Control Panel PWB. The diode should indicate more than 1 meg ohm resistance in one direction and low resistance (0.6 Kohms) in the other direction. Replace the Control Panel PWB if the diode is failed (REP 1.7) (PL 1.1).

Replace the Copy Counter (PL 7.2).



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OF 5.1 SDF RAP

INITIAL ACTION

- Ensure that the machine configuration codes are correct for the configuration of the copier (General Procedures in Section 6).
- If there appears to be problems with the SDF Drive Motor, go to the OF 5.2 SDF Drive Motor RAP.

PROCEDURE

Ensure that the interlock cheater is installed or that the Front Cover is closed. Enter [5-1]. Open and close the SDF. The SDF Jam light switches on and off.

Y N
| Go to the OF 3.1 Copies Per Minute / SDF Interlock RAP.

Actuate and deactuate the Document Present Sensor. The Dry Ink Light switches on and off.

Y N
| Actuate and deactuate the Document Present Sensor while measuring the voltage from CNB-8 to the copier frame. The voltage changes by 0.5 VDC.

Y N
| There is + 5 VDC from CNB-9 to the copier frame.

Y N
| Replace the SDF PWB (PL 8.1).

Go to Flag 1. Check the wires for an open circuit. Go to Flag 2. Check the wire for an open or short circuit to the copier frame. If the wires are good, replace the Document Present Sensor (PL 8.2).

Replace the SDF PWB (PL 8.1).

A

A

Actuate and deactuate the SDF Exit Sensor. The CRU Light switches on and off.

Y N
| Actuate and deactuate the SDF Exit Sensor while measuring the voltage from CNB-10 to the copier frame. The voltage changes by 0.5 VDC.

Y N
| There is + 5 VDC from CNB-7 to the copier frame.

Y N
| Replace the SDF PWB (PL 8.1).

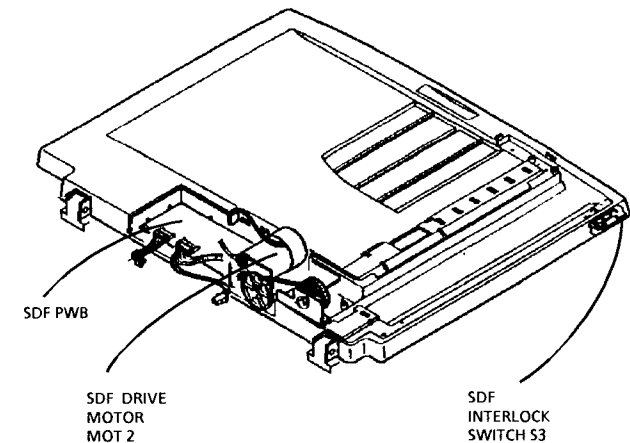
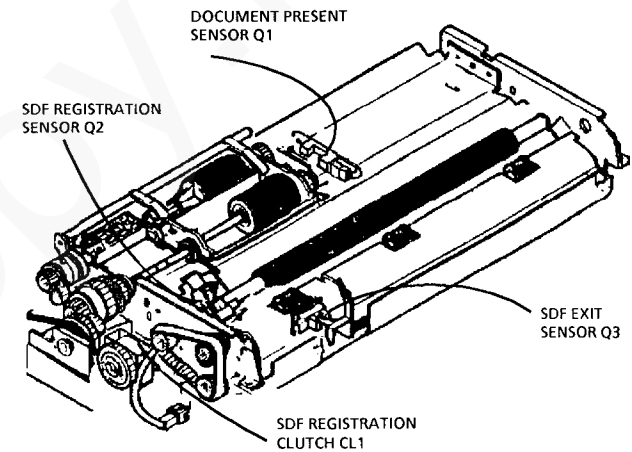
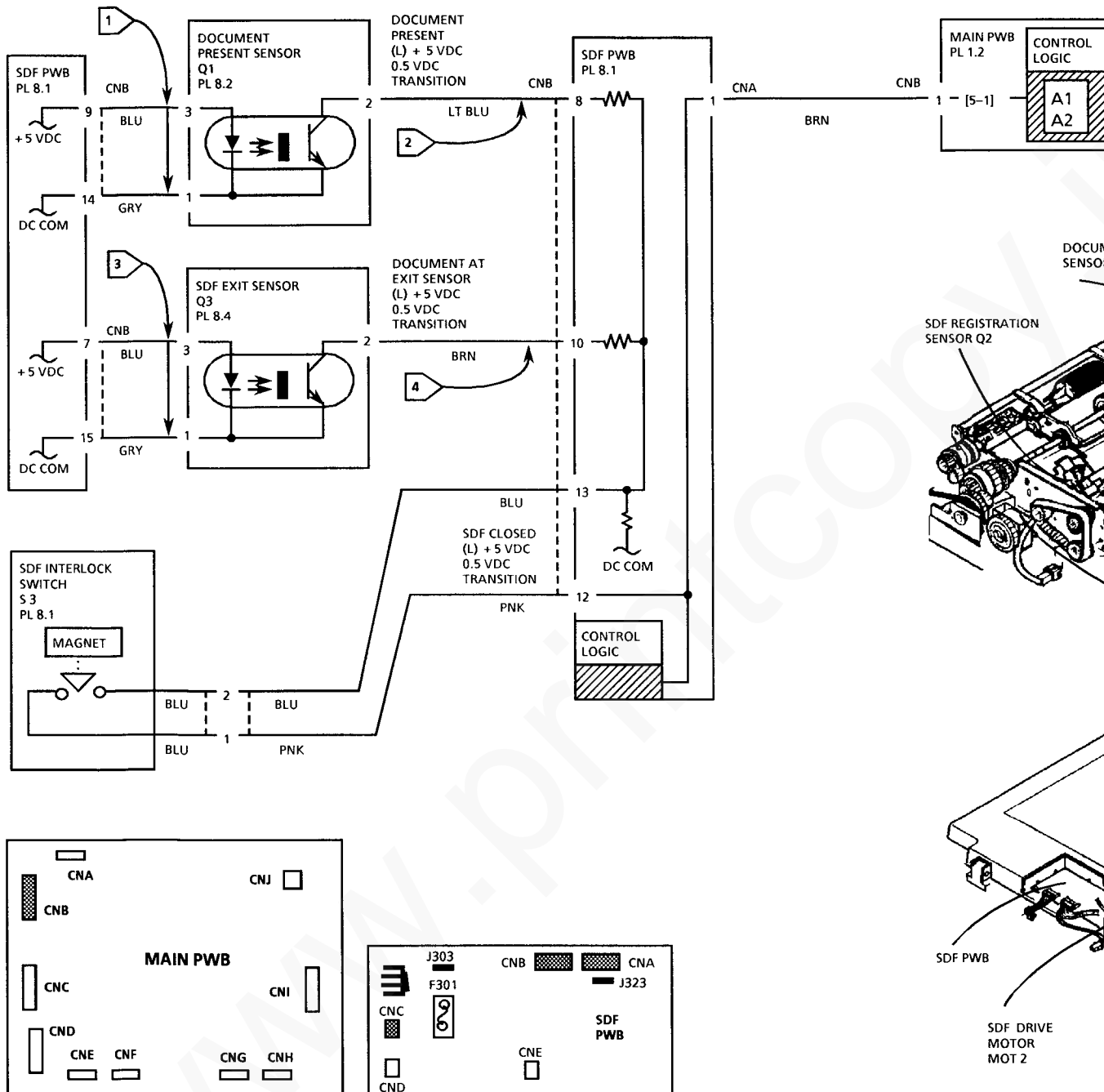
Go to Flag 3. Check the wires for an open circuit. Go to Flag 4. Check the wire for an open or short circuit to the copier frame. If the wires are good, replace the SDF Exit Sensor (PL 8.2).

Replace the SDF PWB (PL 8.4).

Enter [5-2]. Press the Start button. The SDF Motor energizes.

Y N
| Go to the OF 5.2, SDF Drive Motor RAP.

Go to the A1/A2 RAP.



OF 5.2 SDF Drive Motor RAP

PROCEDURE

The SDF Drive Motor is idle when the copier is in standby.

Y N
Go to Flags 4, Flag 5 and Flag 7. Check the wires for an open circuit or a short circuit to the copier frame. The check of the wires is good.
Y N
Repair the wires.

Replace the SDF PWB (PL8.1).
If the problem continues, replace the Main PWB (REP 1.5) (PL1.2).

Enter [5-2]. Press the Start button. The SDF Drive Motor energizes.

Y N
There is +30 VDC from CNC-1 of the SDF PWB to the machine frame.

Y N
There is +30 VDC from CNC-2 of the SDF PWB to the machine frame.

Y N
Check the fuse F301. The fuse is good.

Y N
Replace the fuse.
If the fuse fails again, go to Flags 1 and 2. Check the wires for a short circuit to the copier frame.
If the fuse fails again, replace the SDF Drive Motor (PL8.3).

A B C D
There is +32 VDC from CNB-8 of the Main PWB to the machine frame.

Y N
Replace the Main PWB (REP 1.5) (PL1.2).

Go to Flag 1. Check the wire for an open circuit. If the wire is good, replace the SDF PWB (PL8.1).

Replace the SDF Drive Motor (PL 8.3).

Go to Flag 3, Flag 5, and Flag 7. Check the wires for an open circuit.
If the wires are good, replace the SDF PWB (PL 8.1).
If the problem continues, replace the SDF Drive Motor (PL 8.3).
If the problem continues, replace the Main PWB (REP 1.5) (PL 1.2).

During a copy job, the SDF appears to operate at high speed, or the document appears to feed at high speed.

Y N
Manually rotate the SDF Drive Motor while measuring the voltage from CNE-2 to the copier frame. The voltage changes between approximately +5 VDC and 1 VDC.

Y N
F G

E F G
There is +5 VDC from CNE-1 to the copier frame.

Y N
Replace the SDF PWB (PL 8.1).

Go to Flag 6. Check the wires for an open circuit or a short circuit to the copier frame. If the wires are good, replace the Encoder Sensor (PL 8.3).

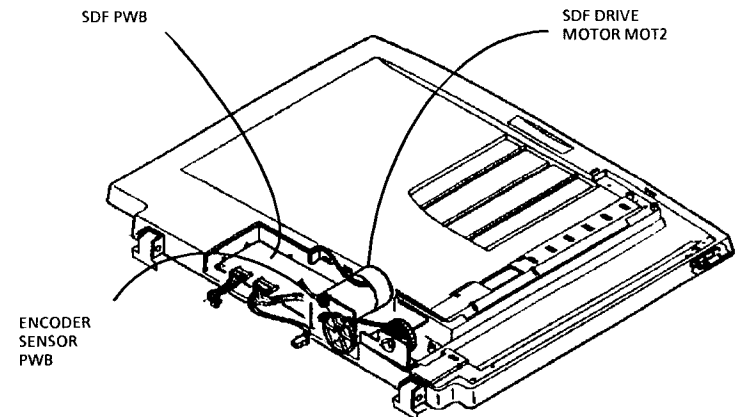
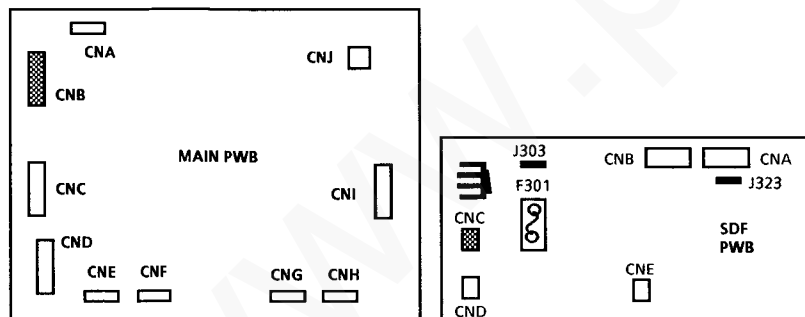
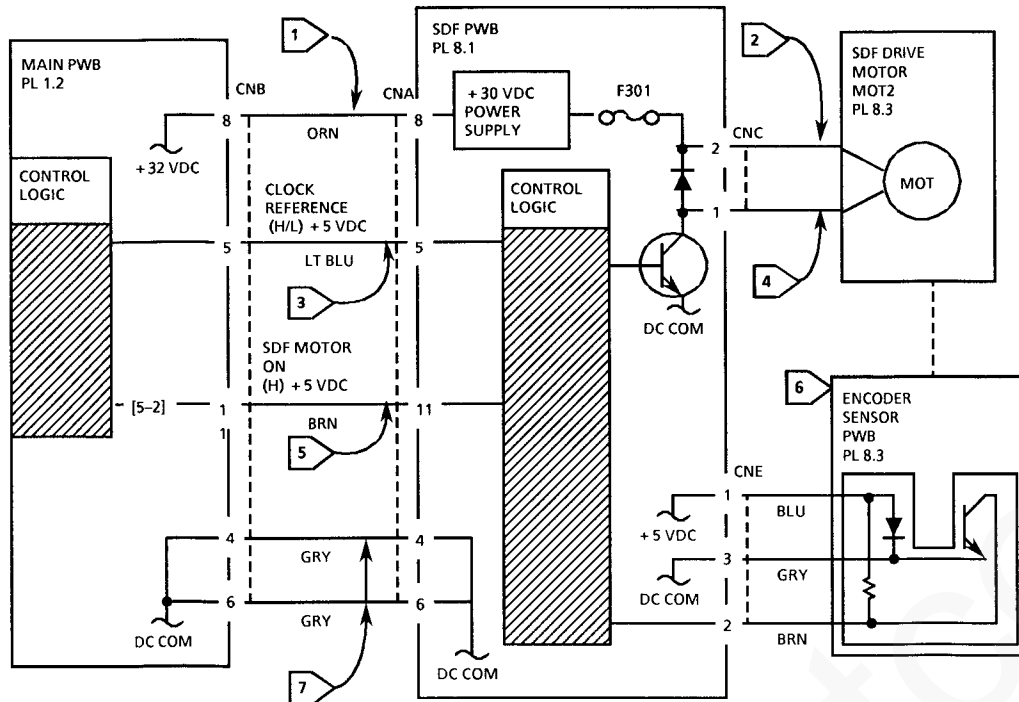
Go to Flag 3 and Flag 7. Check the wires for an open circuit or short circuit to the copier frame.

Check the SDF drives (PL 8.2, PL 8.3). Ensure that they are free from wear, damage, contamination, obstructions, or binding.

If the problem continues, replace the SDF PWB (PL8.1).

If the problem continues, replace the Main PWB (REP 1.5) (PL1.2).

Go to Flag 6 and check the circuit of the Encoder Sensor PWB. If the circuit is good, replace the Encoder Sensor PWB (PL 8.3).



OF 5.3 DOCUMENT DAMAGE RAP

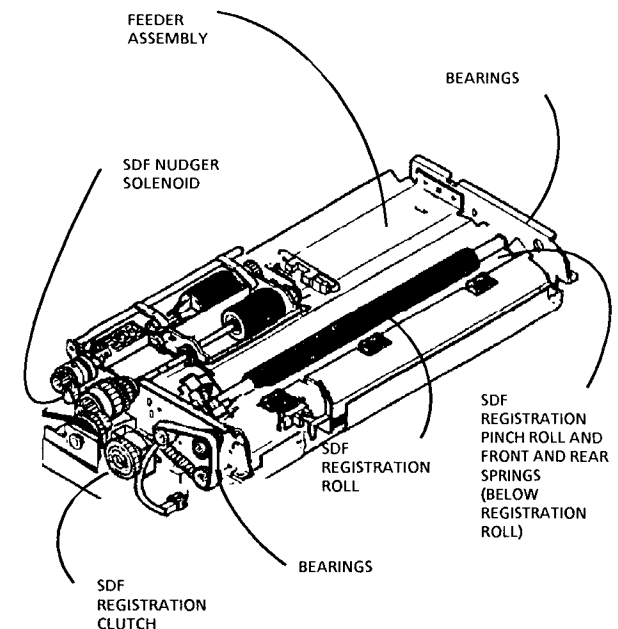
INITIAL ACTION

- If the SDF appears to operate at high speed, or the document appears to feed at high speed, go to Flag 6 in the OF 5.2, SDF Drive Motor RAP.
- Ensure that Tag 3 is installed.

PROCEDURE

Perform the following as required until the problem is resolved:

1. Ensure that there are no obstructions in the document path.
2. Check that the bearings for the SDF Registration Roll, the SDF Registration Pinch Roll, the SDF Takeaway Roll, and the Exit Roller are secure in the frames (PL 8.4).
3. Check that the Feeder Assembly is secure in the SDF.
4. Check that the SDF Registration Clutch and the SDF Nudger Clutch are not energized when the SDF is in standby. If one of the components is energized, go to the A1/A2 RAP. Go to Flag 3 or Flag 5 and check the wires for a short circuit.
5. If the corners of the lead edge of the document get folded, perform the following:
 - Check the installation of the SDF Document Glass (REP 5.11).
 - Check the installation of the SDF Registration Guide (REP 5.10).
 - Check that the Pinch Rollers move and rotate freely (PL 7.2).
 - Check that the Left and Right Counterbalance Supports are secure (PL 3.1B).
 - Replace the Left Counterbalance (PL 8.1).
6. Check that the SDF Registration Pinch Roll can be pushed down and returns to form a nip with the SDF Registration Roll (PL 8.4). Ensure that the front and rear springs are in position on the bearings.



OF 6.1, OPTICS OVERHEAT RAP

PROCEDURE

Switch off the power. Disconnect the power cord. There is approximately 2 ohms from CLL-WH (BK) to CND-BK (WH) on the Input Power PWB.

Y N
Check the continuity of the Overtemperature Fuse. The fuse is good.

Y N
Replace the Overtemperature Fuse (REP 6.6) (PL 3.3).

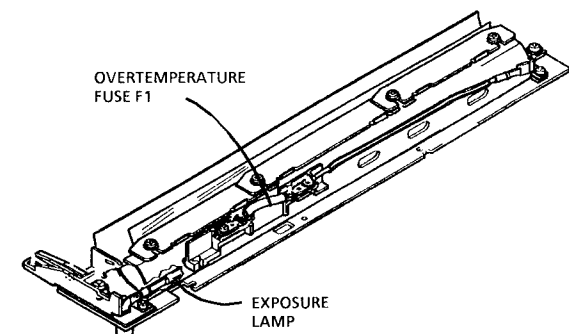
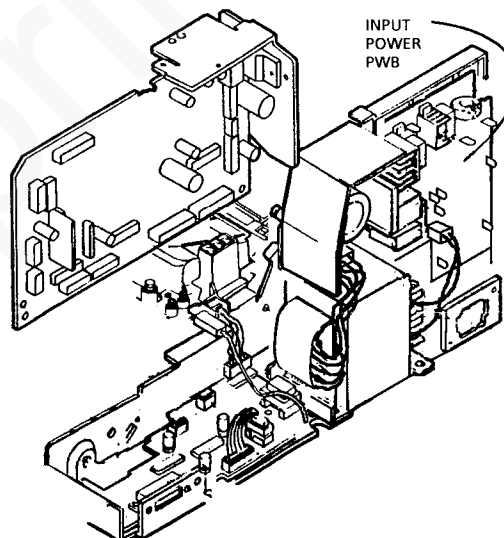
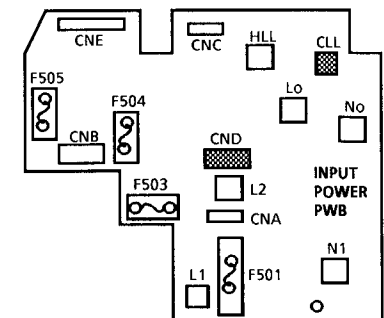
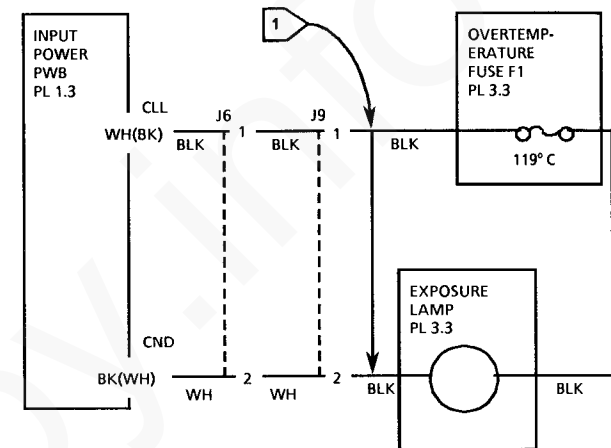
Check the continuity of the Exposure Lamp. The lamp is good.

Y N
Replace the Exposure Lamp (REP 6.3) (PL 3.3).

Go to Flag 1. Check the wires for an open circuit.

After repairing the circuit, switch on the power. If the Exposure Lamp energizes, and remains energized, switch off the power. Then, go to the OF 6.2, Exposure Lamp RAP.

Go to the OF 1.6, Cooling Fans RAP.



OF 6.2, EXPOSURE LAMP RAP

PROCEDURE

The Exposure Lamp is off in the standby mode.

Y N
There is +0.2 VDC from CNC-3 on the Input Power PWB to the machine frame.
Y N
Replace the Input Power PWB (REP 1.2) (PL 1.3).
Replace the Main PWB (REP 1.5) (PL 1.2).

Switch off the power. Disconnect the power cord. There is 3 ohms or less from CLL-WH(BK) to CND-BK(WH) on the Input Power PWB.

Y N
The resistance of the Overtemperature Fuse is 3 ohms or less.
Y N
Replace the Overtemperature Fuse (PL 3.3). Go to the OF 1.6, Cooling Fans RAP.
The resistance of the Exposure Lamp is 3 ohms or less.
Y N
Replace the Exposure Lamp (PL 3.3). Go to the OF 1.6, Cooling Fans RAP.
Go to Flag 3. Check the wires for an open circuit.

Power up the copier. Enter [6-4]. Press the Start button. The meter indicates +0.2 VDC from CNC-3 on the Input Power PWB to the copier frame.

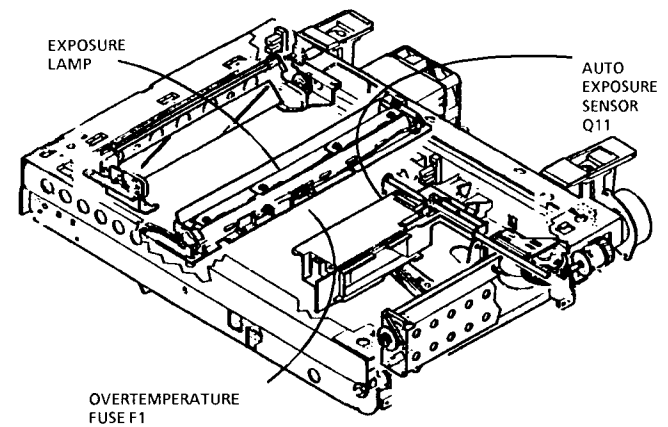
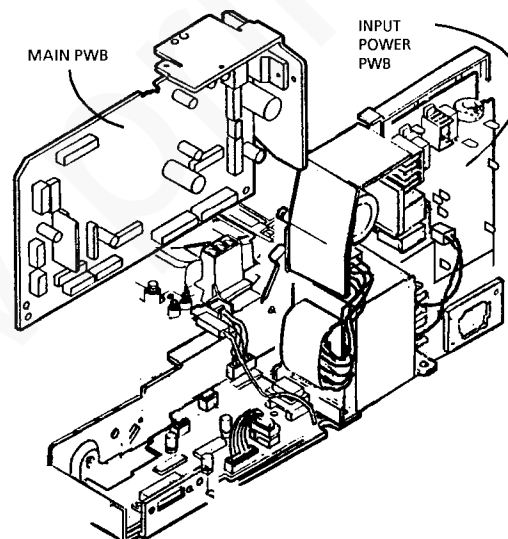
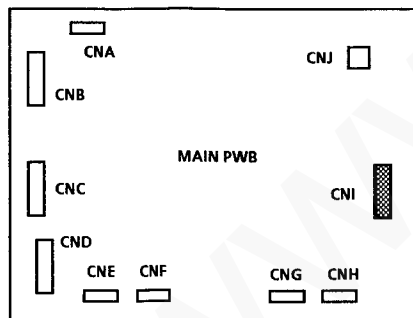
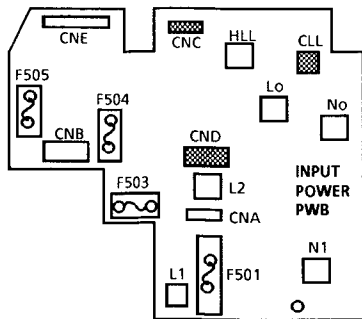
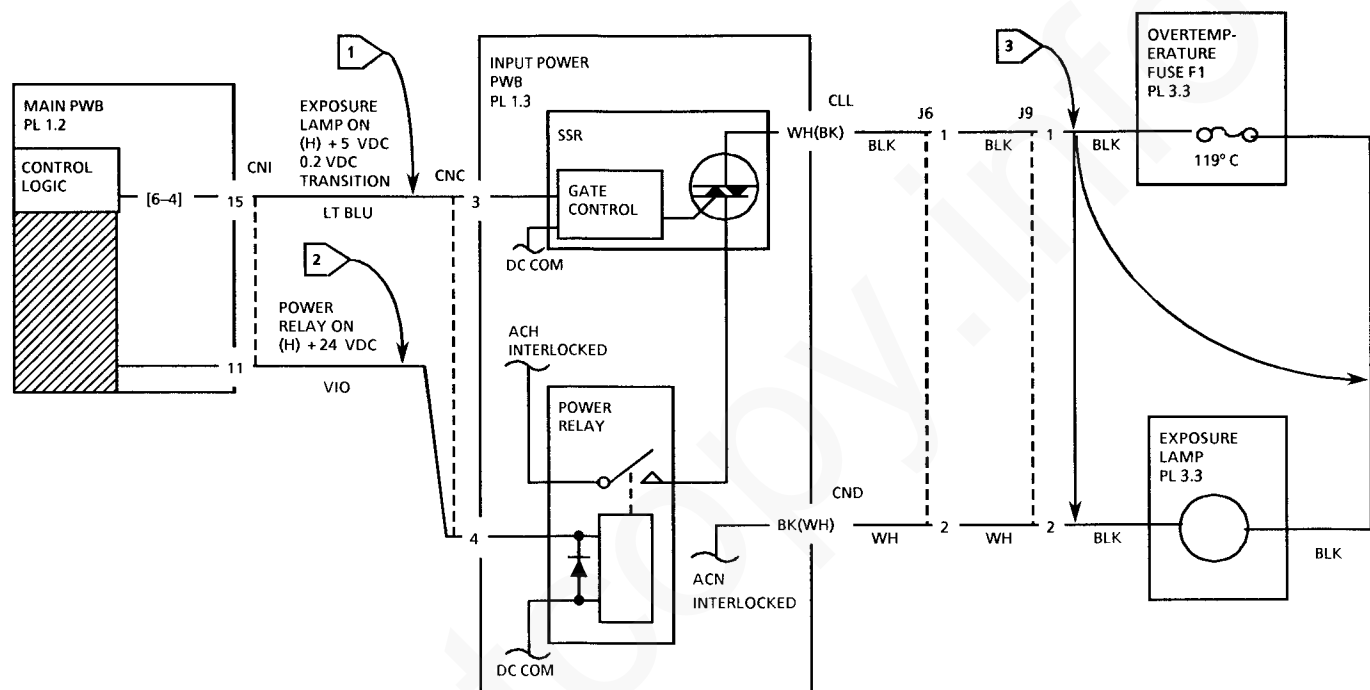
Y N
A B

A B
Go to Flag 1. Check the wire for an open circuit.
If the wire is good, replace the Main PWB (REP 1.5) (PL 1.2).

The meter indicates +24 VDC from CNC-4 on the Input Power PWB to the copier frame.

Y N
Go to Flag 2. Check the wire for an open circuit.
If the wire is good, replace the Main PWB (REP 1.5) (PL 1.2).

Replace the Input Power PWB (PL 1.3).



OF 7.1, TRAY 1 PAPER INDICATOR RAP

INITIAL ACTION

Ensure that the actuator for the Tray 1 Empty Sensor on both the 250 and 500 sheet Tray 1 moves freely.

PROCEDURE

The capacity of Tray 1 is 250 sheets.

Y N
There is +5 VDC from CND-3 on the Lower PWB to the copier frame.

Y N
Replace the Lower PWB (REP 1.6) (PL 1.3).

Go to Flag 3, Flag 4, and Flag 5. Check the wires for an open circuit or a short circuit.

If the wires are good, clean the Tray 1 Empty Sensor.

If the problem continues, replace the Tray 1 Empty Sensor (PL 4.5).

If the problem continues, replace the Lower PWB (REP 1.6) (PL 1.3).

There is +5 VDC from CND-3 on the Lower PWB to the copier frame.

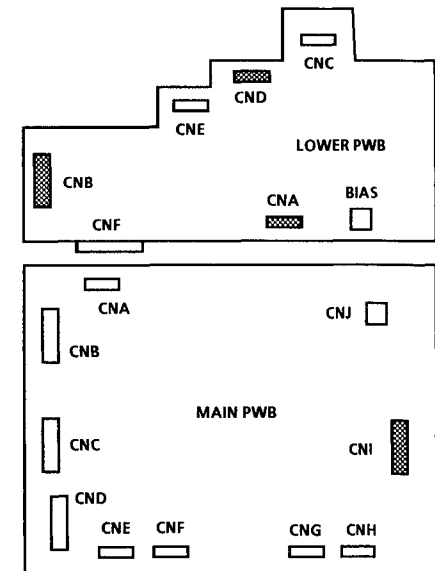
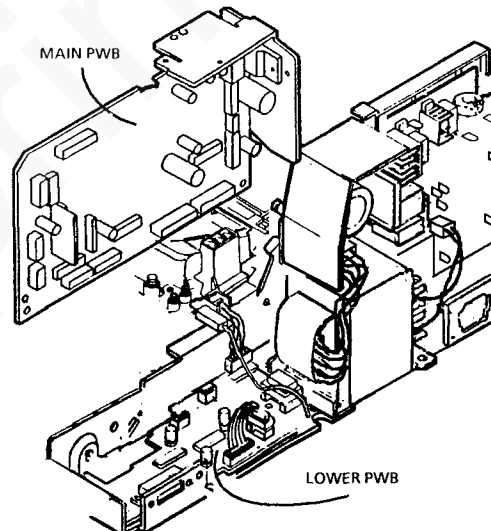
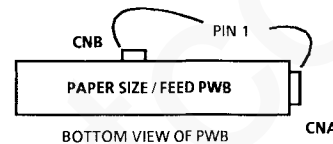
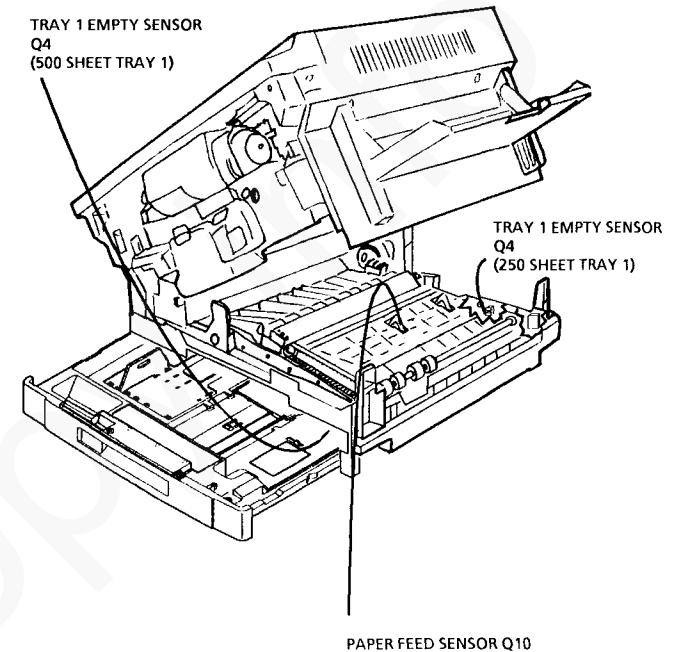
Y N
Replace the Lower PWB (REP 1.6) (PL 1.3).

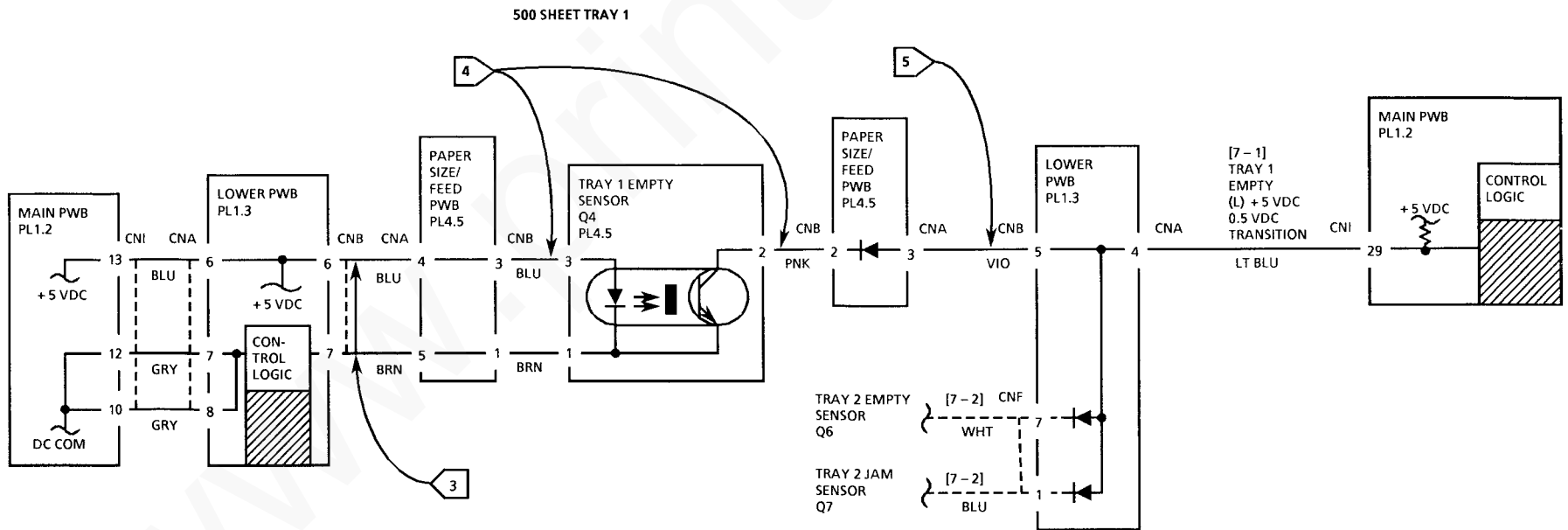
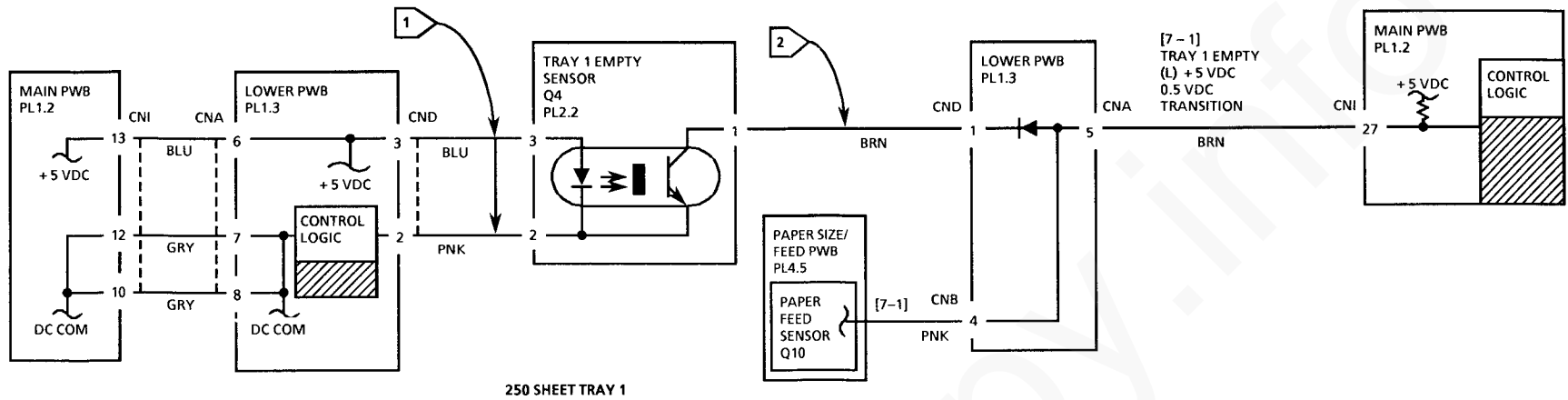
Go to Flag 1 and Flag 2. Check the wires for an open circuit or a short circuit.

If the wires are good, clean the Tray 1 Empty Sensor.

If the problem continues, replace the Tray 1 Empty Sensor (PL 2.2).

If the problem continues, replace the Lower PWB (REP 1.6) (PL 1.3).





OF 7.2, TRAY 2 PAPER INDICATOR RAP

INITIAL ACTION

Ensure that the actuator for the Tray 2 Empty Sensor moves freely.

PROCEDURE

There is +5 VDC from CNF-11 on the Lower PWB to the copier frame.

Y N

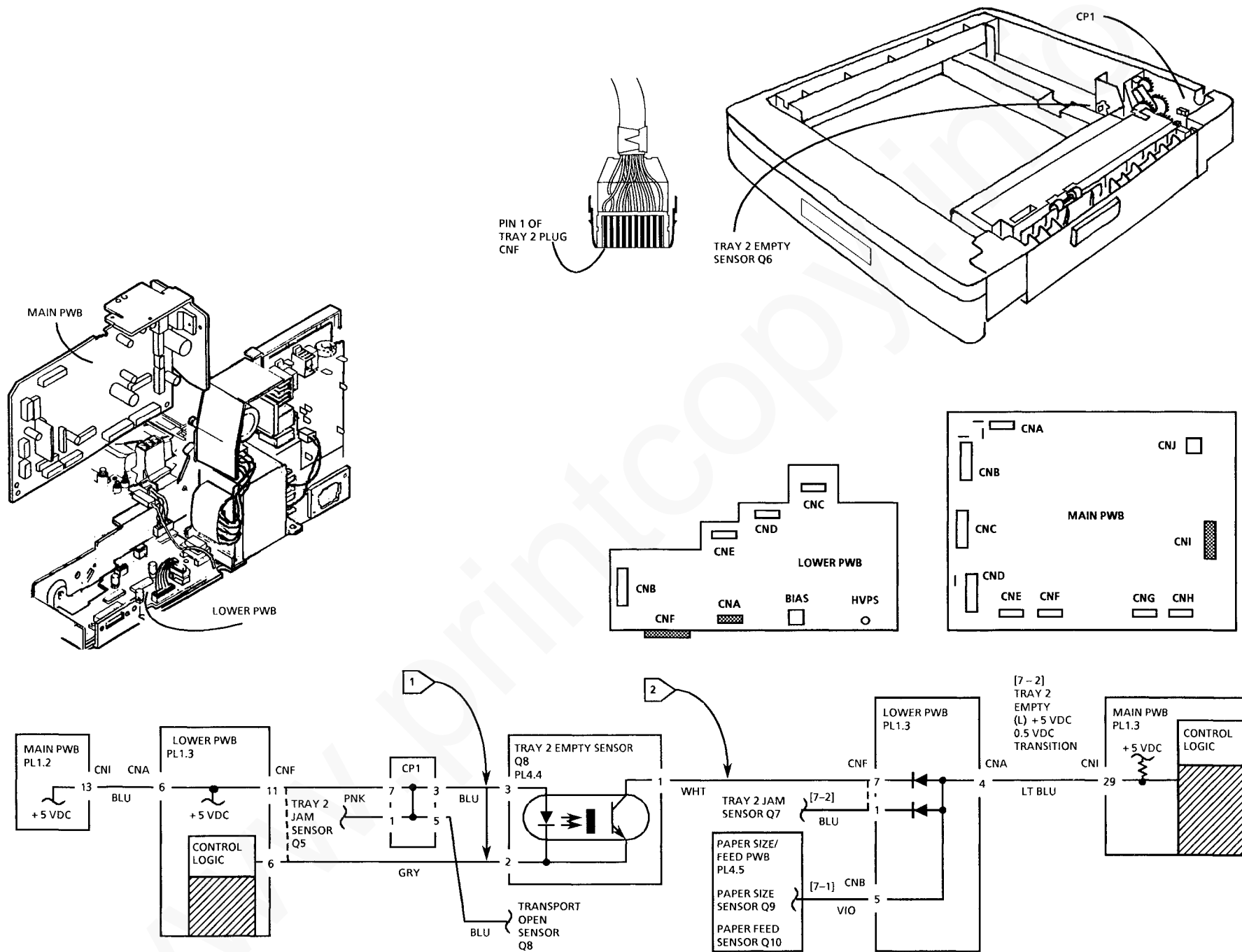
Replace the Lower PWB (REP 1.6) (PL 1.3).

Go to Flag 1 and Flag 2. Check the wires for an open circuit or a short circuit to copier frame or DC common.

If the problem continues, clean the Tray 2 Empty Sensor.

If the problem continues, replace the Tray 2 Empty Sensor (PL 4.4).

If the problem continues, replace the Lower PWB (REP 1.6) (PL 1.3).



OF 7.3, MULTIFEED RAP

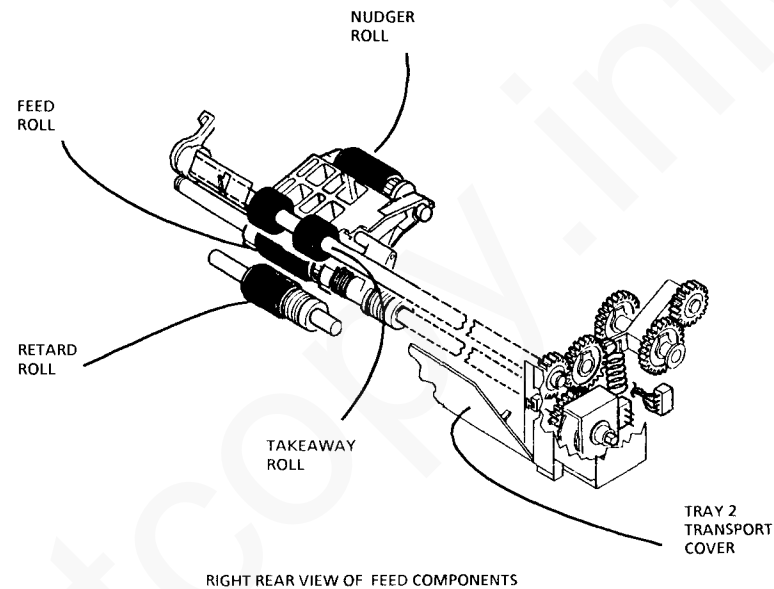
INITIAL ACTION

Fan the paper in the paper trays. Ensure that the paper is against the left guide. For the Bypass Tray, remove and restack the paper.

PROCEDURE

Perform the following until the problem is resolved.

1. Replace the Retard Roller (Tray 1, REP 7.7, PL 4.11; Tray 2, REP 7.4, PL 4.4, Bypass Tray REP 7.2, PL 4.9).
2. Replace the Nudger Roller (Tray 1, REP 7.1, PL 4.6; Tray 2, REP 7.4, PL 4.7, Bypass Tray REP 7.2, PL 4.9).
3. Clean the Feed Roll (Maintenance Procedures, Section 1).



OF 8.1, PAPER DRIVES RAP

PROCEDURE

There is +24 VDC from CNG-2 on the Main PWB to the machine frame in the standby mode.

Y N

There is +24 VDC from CNG-1 on the Main PWB to the machine frame.

Y N

Replace the Main PWB (REP 1.5) (PL 1.2).

Go to Flag 1 and Flag 2. Check that the wires are not shorted to copier frame or DC common. Go to Flag 1, Flag 2, and Flag 3. Check the wires and the Main Drive Motor PWB for an open circuit.

If the wires and PWB are good, check that the connector CN-2 that is on the Main Drive Motor PWB is secure on the PWB and that there is no space between the connector and the PWB. Replace the Main Drive Motor if these conditions are not met (PL 2.3). If the problem continues, replace the Feed / Transport Clutch (PL 2.3).

Enter [8-6] and press the Start button. The voltage goes from +24 VDC to approximately +1VDC.

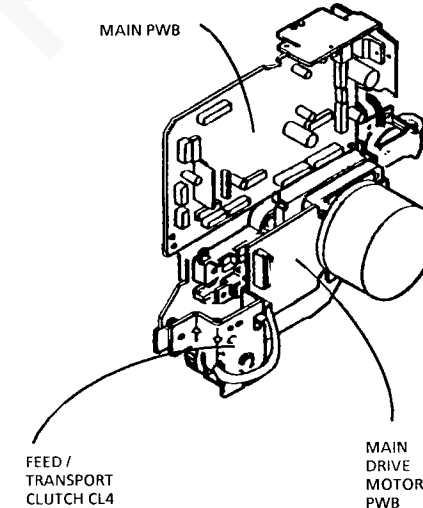
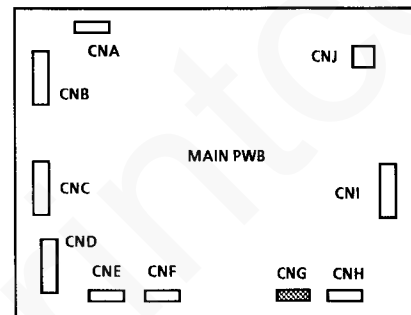
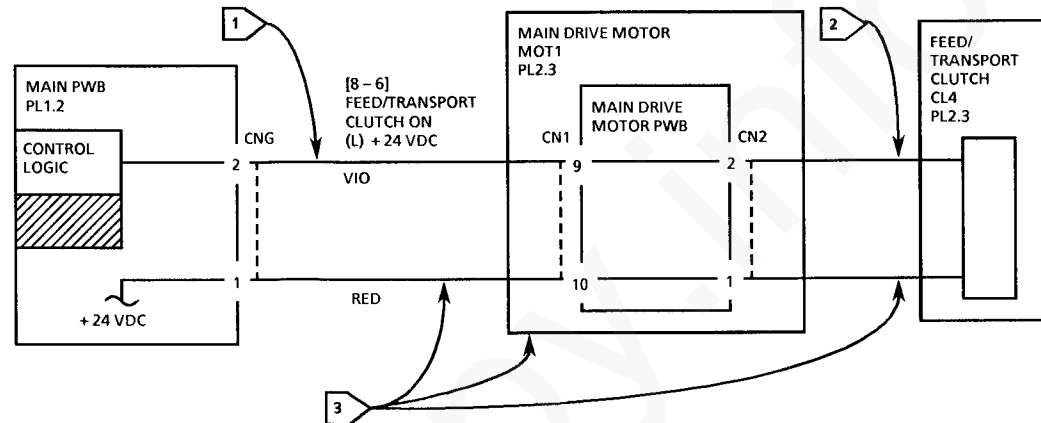
Y N

Go to Flag 1, Flag 2, and Flag 3. Ensure the wires are not shorted together and replace the Main PWB (REP 1.5) (PL 1.2).

Check the Registration Buckle (ADJ 8.1).

Check that the connector CN-2 that is on the Main Drive Motor PWB is secure on the PWB and that there is no space between the connector and the PWB. Replace the Main Drive Motor if these conditions are not met (PL 2.3).

If the problem continues, replace the Feed / Transport Clutch (PL 2.3).



OF 9.1, DISCHARGE LAMP RAP

PROCEDURE

Ensure that the Front Door is closed or the cheater is installed. There is +24 VDC from CNI-5 on the Main PWB to the machine frame.

Y N
There is +24 VDC from CNI-16 to the copier frame.

Y N
Replace the Main PWB (REP 1.5) (PL 1.2).

Go to Flag 1. Check the wires for an open circuit. If the wires are good, replace the Discharge Lamp (PL 5.5).

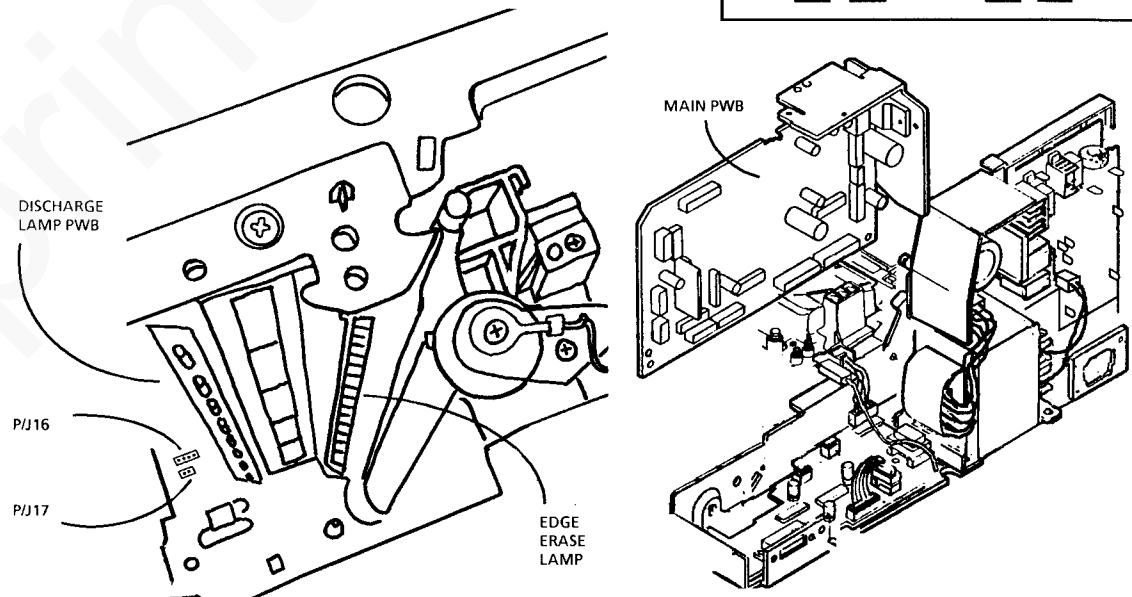
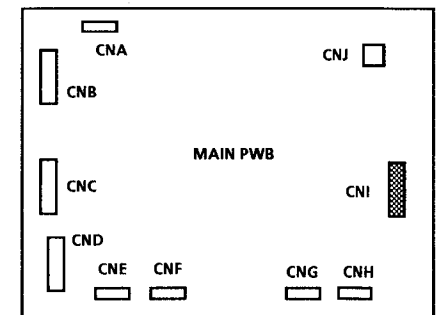
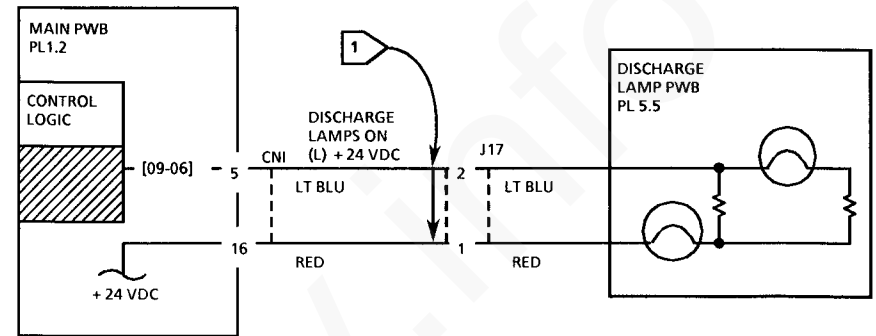
Enter [9-6] and press the Start button. The voltage goes from +24 VDC to approximately +1 VDC.

Y N
Replace the Main PWB (REP 1.5) (PL 1.2).

The eight Discharge Lamps illuminate.

Y N
Replace the Discharge Lamp (PL 5.5).

The Discharge Lamps appear to be operating correctly. Go to Flag 1 and check for loose connections.



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OF 9.2, HVPS RAP

INITIAL ACTION

- Check that the HVPS connections on the Copy Cartridge are clean and tight.
- Check the connections on the Transfer/ Detack Corotron (REP 9.1).

PROCEDURE

There is +32 VDC from CN901-7 to the copier frame.

Y N
There is +32 VDC from CNI-25 to the copier frame.
Y N
Replace the Main PWB (REP 1.5) (PL 1.2).
Go to Flag 1 and Flag 2. Check the wires for an open circuit. If the wires are good, replace the Lower PWB (REP 1.6) (PL 1.3).

NOTE: The copier must be in the diagnostics mode while checking the following voltages. The voltages are different values when in the run mode.

Enter the diagnostic mode. Perform the following:

- Check DC voltages in the standby mode that are shown in the Lower PWB Output Voltage chart. Measure from CNC to the copier frame.
- Enter [9-2] and check DC voltages that are shown in the Lower PWB Output Voltage chart. Measure from CNC to the copier frame.

A

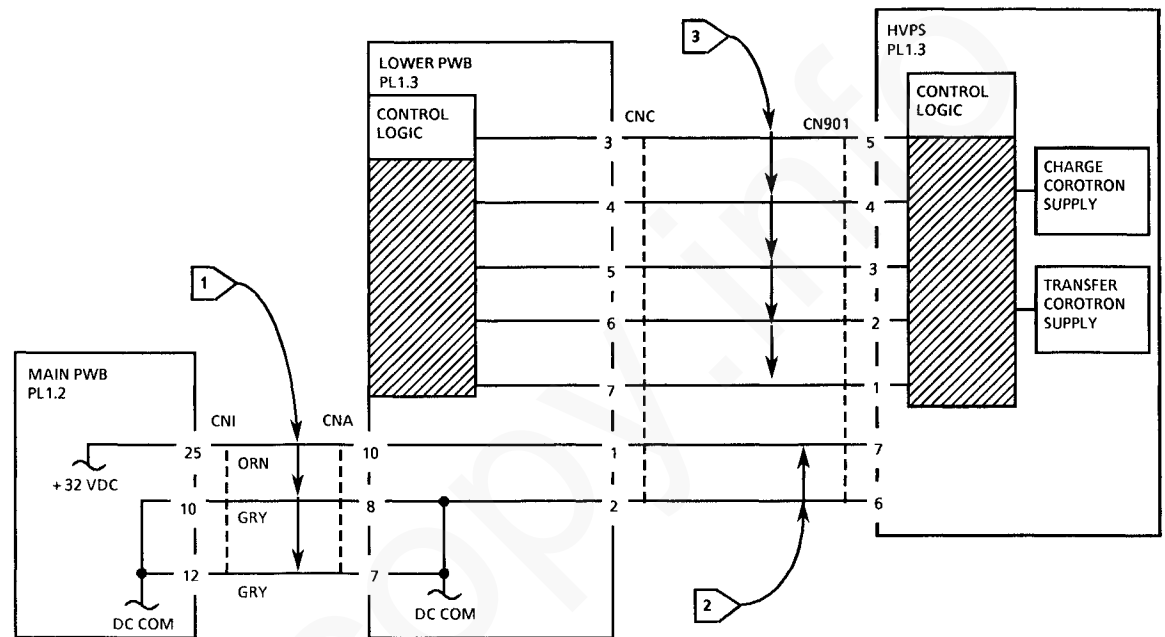
A
The measured voltages are the same as the values in the chart.

Y N
Go to Flag 3. Check the wires for an open or short circuit. The wires are good.

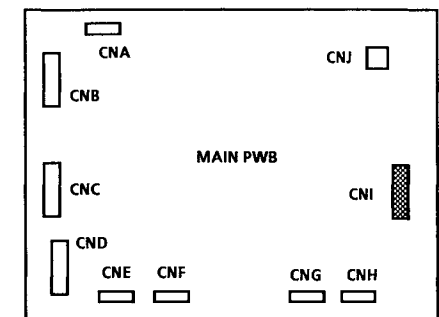
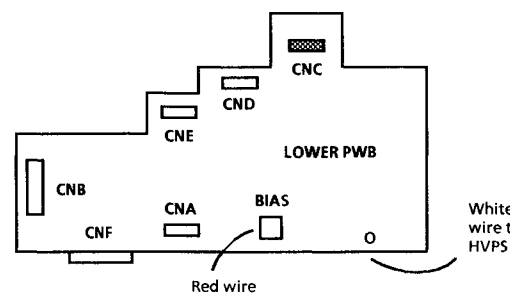
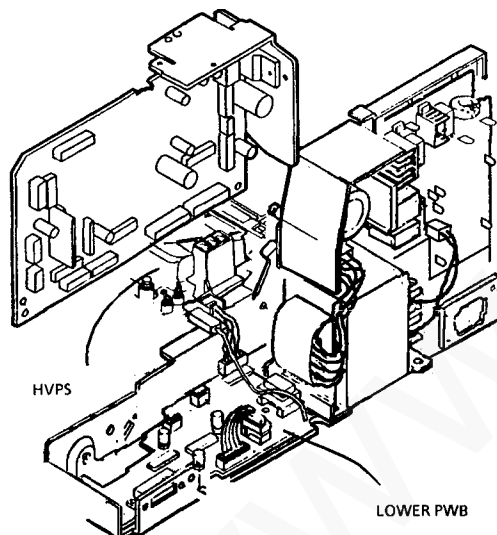
Y N
Repair the wires.

Replace the Lower PWB (REP 1.6) (PL 1.3).

Replace the HVPS (REP 9.2) (PL 1.3).



LOWER PWB HVPS DC OUTPUT VOLTAGE		
CNC PIN	DIAGNOSTICS	
	STAND BY	9 - 2
3	27.8	0.8
4	6.5	3.4
5	6.6	0.7
6	6.6	0.7
7	6.6	0.7



OF 9.3, DEVELOPER BIAS RAP

PROCEDURE

Swing out the Dry Ink/Waste bottle. Cheat the Interlock Switch. Press the Start button and measure the voltage at the terminal of the red wire on the developer housing. The following measurements are made:

The voltage is -200 VDC during the copy cycle. And at the beginning of the copy cycle and at the end of the copy cycle, the voltage goes to 50 VAC as observed on the bar graph of the DMM.

Y N
Make the same measurements on the Lower PWB. The voltages are present.

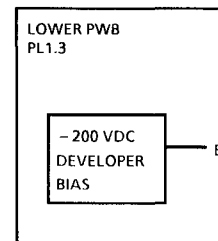
Y N
Disconnect the Bias terminal from the Lower PWB and repeat the voltage check. The voltages are present.

Y N
Replace the Lower PWB (REP 1.6) (PL 1.3).

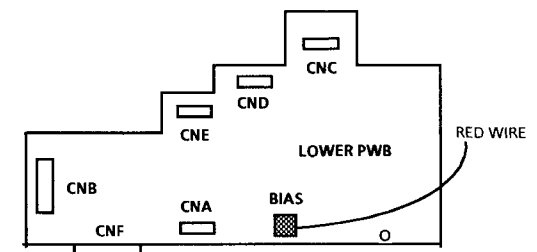
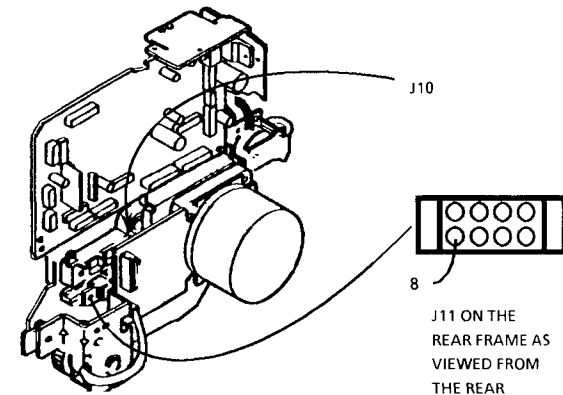
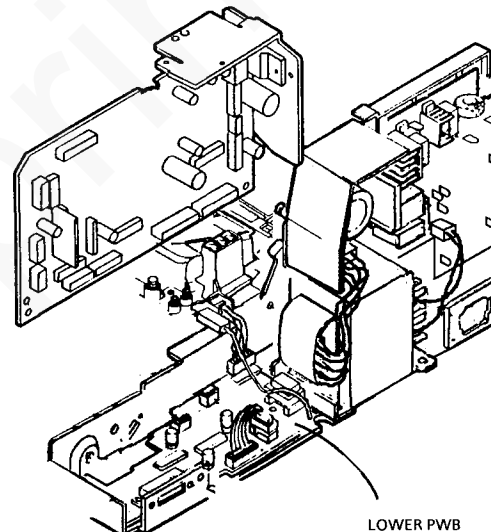
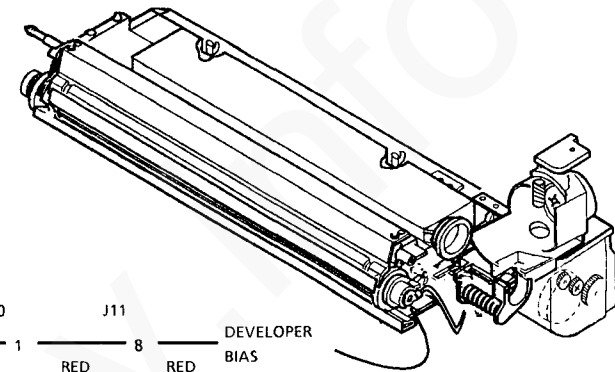
Check the wiring from the Lower PWB bias terminal to the front of the Developer Housing for a short circuit. If the wiring is good, replace the Developer Assembly (REP 9.3) (PL 5.3).

Check the wiring from the Lower PWB bias terminal to the front of the Developer Housing for an open circuit. If the wiring is good, replace the Developer Assembly (REP 9.3) (PL 5.3).

Replace the Developer Assembly (REP 9.3) (PL 5.3).



-200 VDC J10 1 RED J11 8 RED DEVELOPER BIAS



OF 9.4, EDGE ERASE RAP

PROCEDURE

Connect the DMM from CNI-9 to the machine frame. Enter [9-7] and press the Start button. The voltage changes from +24 VDC to approximately +2 VDC in 2 volt increments.

NOTE: The voltage changes are the same for R/E copiers and 1:1 copiers.

Y N
There is +24 VDC from CNI-20 on the Main PWB to the copier frame.

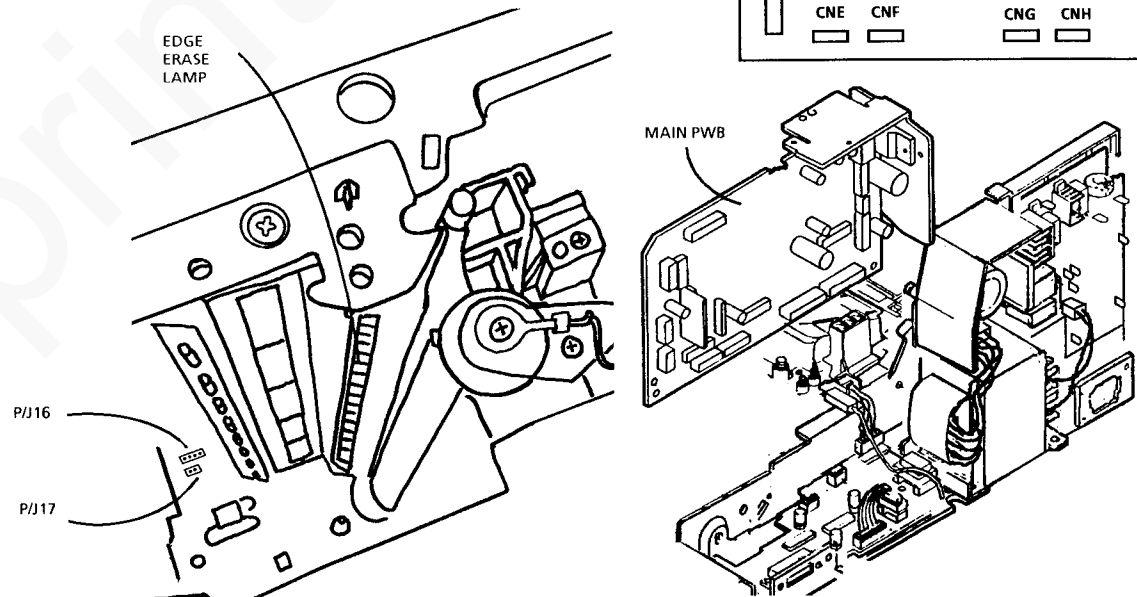
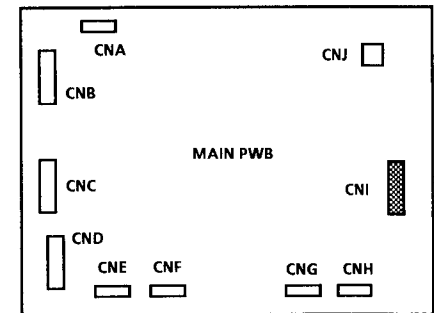
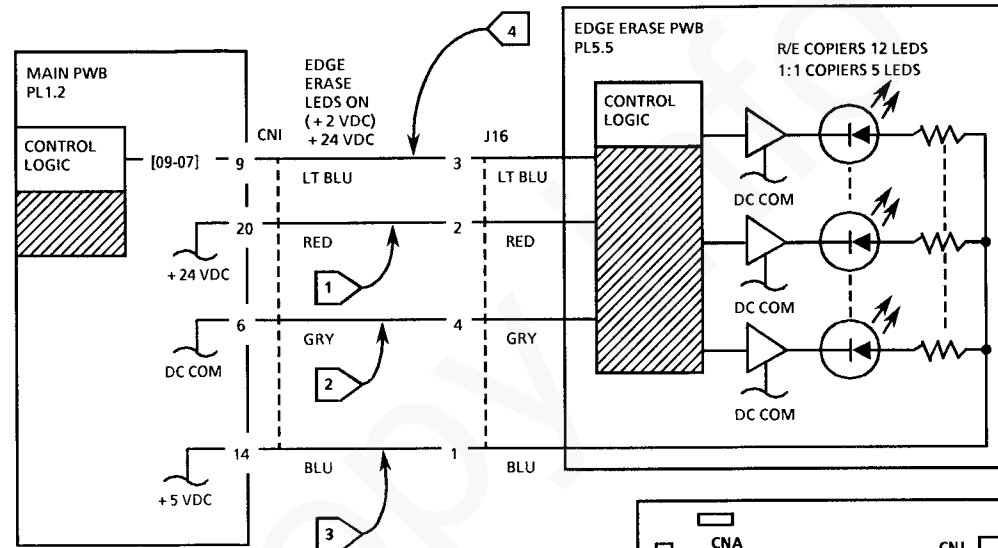
Y N
Go to Flag 1. Check the wire for an open circuit or a short circuit. If the wires are good, replace the Main PWB (REP 1.5) (PL 1.2).

There is +5 VDC from CNI-14 on the Main PWB to the copier frame.

Y N
Go to Flag 2. Check the wire for an open circuit or a short circuit. If the wires are good, replace the Main PWB (REP 1.5) (PL 1.2).

Go to Flags 3 and 4. Check the wires for an open or short circuit. If the wires are good, replace the Edge Erase Lamp (PL 5.5).

Replace the Edge Erase Lamp (PL 5.5).



OF 9.5 DRY INK SENSOR RAP

PROCEDURE

Remove the Developer Assembly (REP 9.3). Remove the Developer Cartridge by using the small screwdriver to release the locking tab while pulling the cartridge off. Check that the Developer satisfies the following conditions:

- Covers most of the augers
- Is not caked
- Feels like it is primarily grit (carrier) and not Dry Ink

The developer satisfies the conditions listed above.

Y N

Replace the Developer (REP 9.8) (PL 5.2A).

Install the Developer Assembly. Connect the DMM from CNF-5 to the machine frame. Make a copy The DMM indicates between +3.5 to +1.5 VDC.

Y N

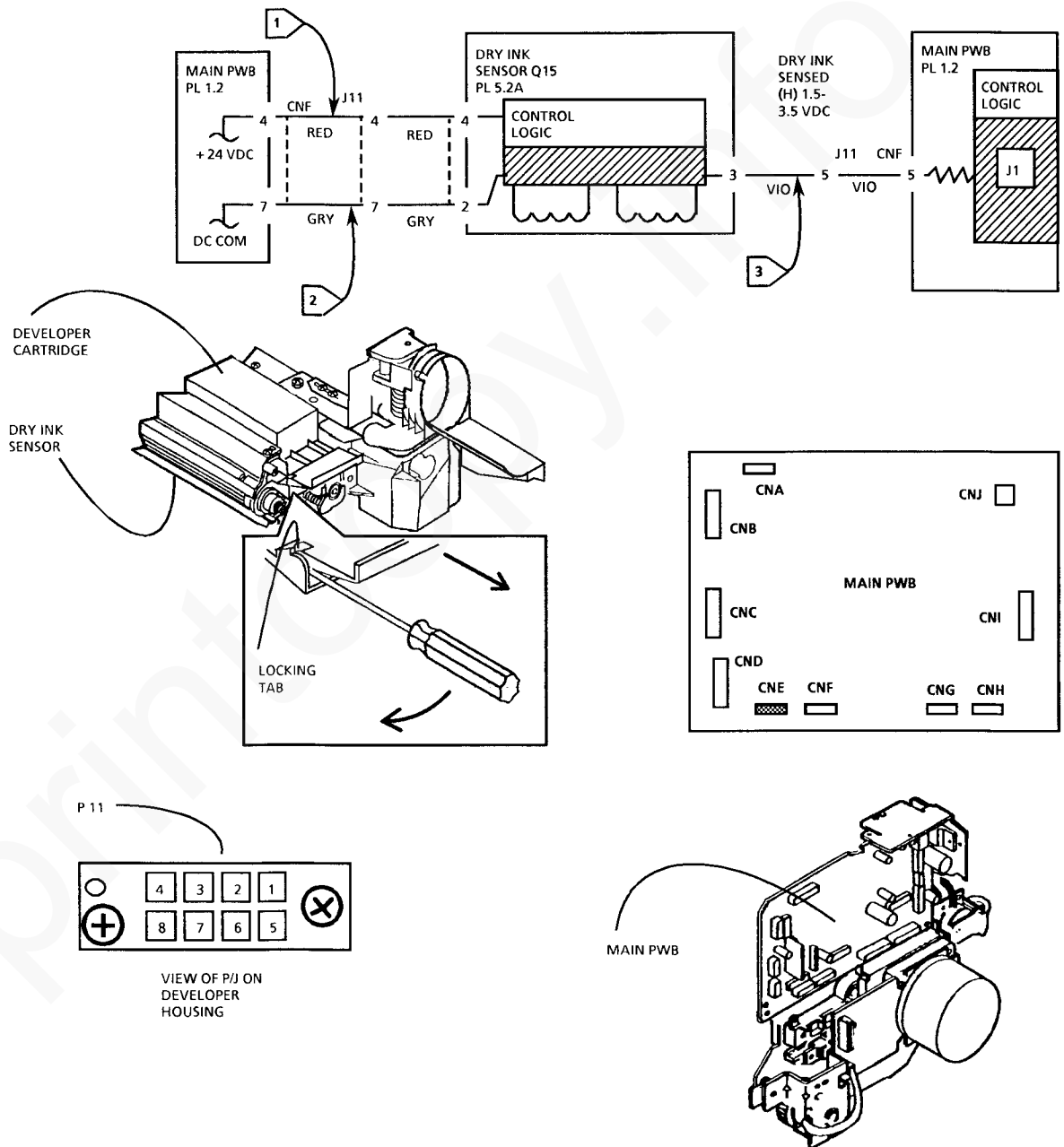
Switch on the copier, measure the voltage from CNF-4 to CNF-7, then switch off the copier. The DMM indicates +24 VDC.

Y N

Replace the Main PWB (REP 1.5) (PL 1.2).

Go to Flags 1, 2, and 3. Check the wires for an open circuit or a short circuit. If the wires are good, replace the Dry Ink Sensor (PL 5.2A) and the Developer (REP 9.8) (PL 5.2A).

Replace the Developer (REP 9.8) (PL 5.2A). Then enter [20-1] and press the Start button. If the problem continues, replace the Main PWB (REP 1.5) (PL 1.2).

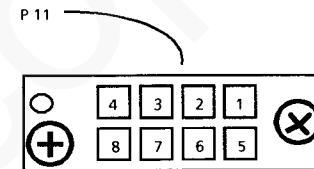
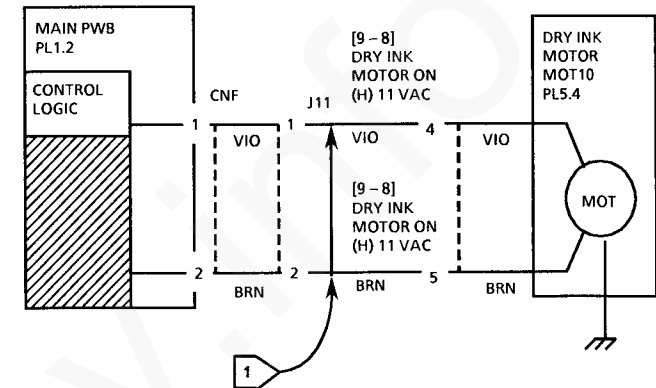


OF 9.6, DRY INK MOTOR RAP

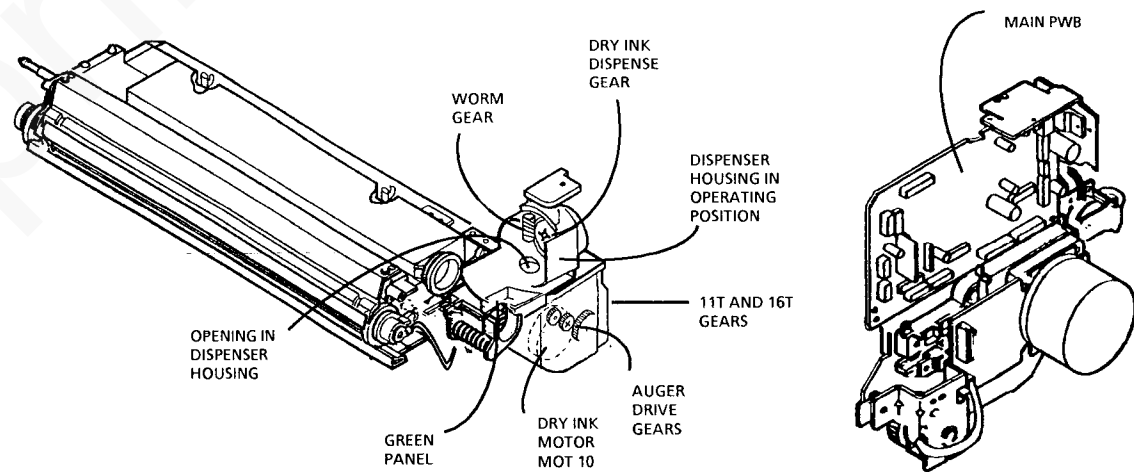
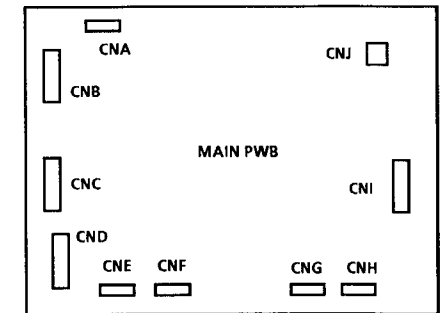
PROCEDURE

Perform the following.

1. Remove the Developer Assembly (REP 9.3).
2. Check the Worm Gear, 11T gear, 16T gear, and the Auger Drive Gears for binding, wear, or damage. Repair or replace the gears as required (PL5.4).
3. Disconnect the P/J for the Dry Ink Motor and reinstall the Developer Assembly.
4. Enter [9-8], press the Start button, and measure the voltage from pin 4 to pin 5 at the plug side of the motor connector. If the voltage measures 22 VAC, replace the Dry Ink Motor (PL 5.4). If the voltage is not measured, go to Flag 1. Check the wires for an open circuit or a short circuit. If the wires are good, replace the Main PWB (PL 1.2) (REP 1.5).



VIEW OF P/J ON
DEVELOPER
HOUSING



OF 9.7, STRIPPER FINGER SOLENOID RAP

PROCEDURE

Open the copier. Cheat the Interlock Switch. Enter [8-1] and press the Start button. The Stripper Fingers move toward the Photoreceptor.

Y **N**
Push on the movable part of the Stripper Finger Solenoid. The Stripper Fingers move toward the Photoreceptor.

Y **N**
The solenoid is always energized.

Y **N**
Check the Stripper Finger Solenoid and the linkage (PL 2.1, PL 5.5).

Go to Flag 1 and check the wire for a short circuit to copier frame or DC common. If the wire is good, replace the Main PWB (REP 1.5) (PL 1.2).

There is +24 VDC from CNI-7 to the copier frame.

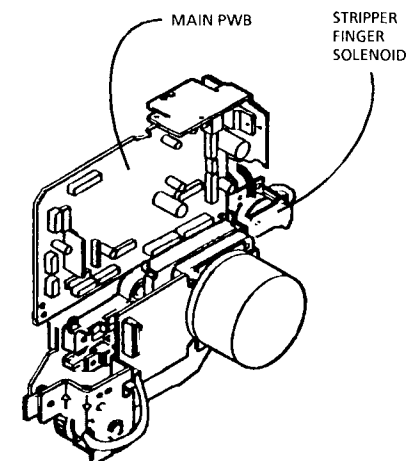
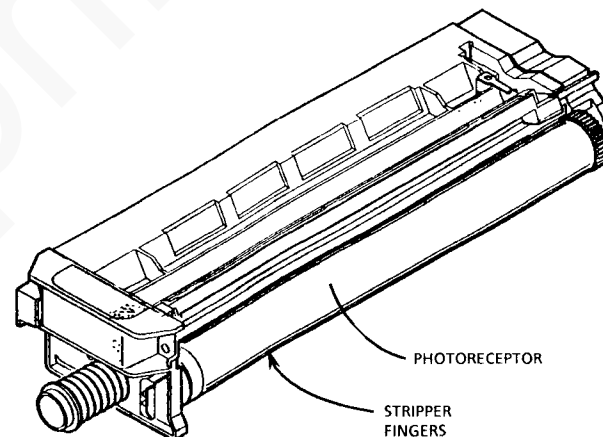
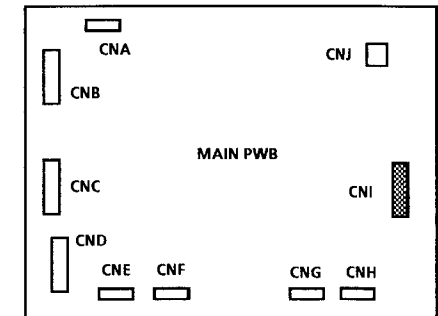
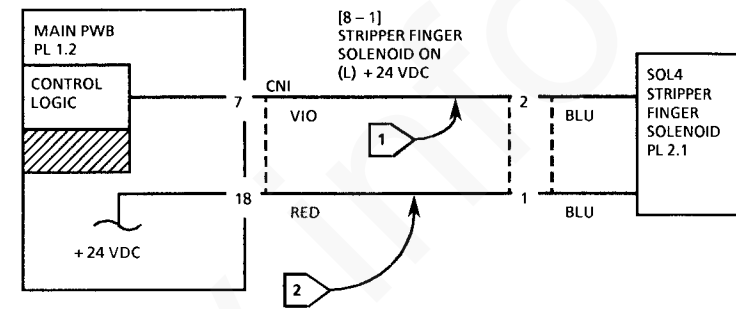
Y **N**
There is +24 VDC from CNI-18 to the copier frame.

Y **N**
Replace the Main PWB (PL 1.2) (REP 1.5).

Go to Flag 1 and Flag 2. Check the wires for an open circuit. If the wires are good, replace the Stripper Finger Solenoid (PL 2.1).

Replace the Main PWB (REP 1.5) (PL 1.2).

Ensure that the paper path in the area of the paper transport and Transfer/Detack corotron is free of burrs or small obstructions (PL 4.5, PL 4.6, PL 4.11, PL 5.6, PL 6.2).



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OF 16.1, NOISE / ODOR RAP

PROCEDURE

The problem is noise.

Y N
The odor may be the product of burning plastic, rubber, or paint.

Y N
Go to Flag 1. Check the wire for an open circuit. An open circuit causes the HVPS to energize when the copier in the standby mode. If the wire is good, replace the Ozone Filter (PL 1.2).

Call the service support team.

Check the following as required until the problem is resolved.

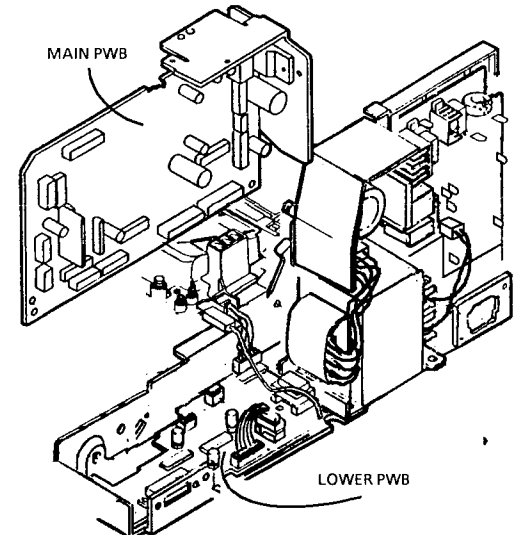
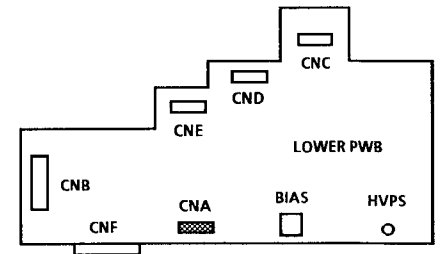
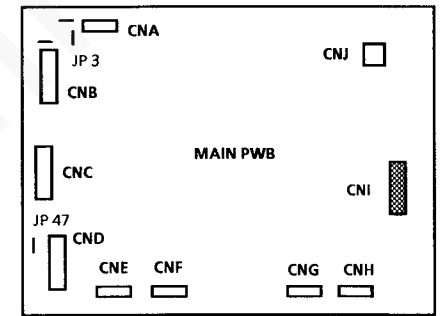
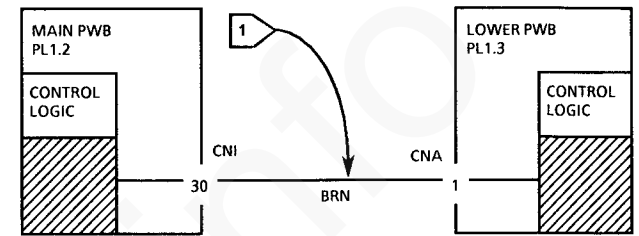
1. The cooling fans for secure mounting, loose covers, loose ducts, or an incorrectly positioned filter
2. The Fuser Exit Roller for Interference with other components
3. The Developer Housing Shoulder Screw installation is secure (behind the Dry Ink/Waste Bottle)
4. The drive gears for broken parts
5. The Developer Housing, Copy Cartridge, or other subsystems for binding
6. Tag 2 is installed on the Developer Housing

7. If low frequency noise occurs after the Start button is pressed, and lasts for 1 second using either tray, and the copier has a Tray 2, go to the C2 RAP and check the circuit of the Tray 2 Feed Clutch.
8. If a low frequency noise during paper feed from Tray 1 or 2 occurs, typically when the paper tray is low on paper, replace the Retard Roll (Tray 1, PL 4.11) (Tray 2, PL 4.4).
9. If a ratchet or click noise is heard, the gears that are driven by the Dry Ink Motor may be slipping. Dry Ink is compacted in the Toner Hopper Auger (PL 5.4). Remove the Dry Ink Cartridge and clean out the dry ink.
10. If a jamming paper or a muffled bang noise is heard, check the Registration Buckle (ADJ 8.1). The Feed / Transport Clutch can remain engaged slightly after the clutch is switched off. Clean the clutch with Film Remover (USCO) or General Cleaning Solvent (RX). If the problem continues, replace the Feed / Transport Clutch (PL 2.3).
11. If a grinding or moaning noise is heard while feeding from Tray 1 but the noise is not heard while feeding from the Bypass Tray, the Bypass Clutch Spring (PL 4.9) and Clutch Gear (PL 4.9) require lubrication. Remove the Bypass Tray Assembly (REP 7.2) and apply a few drops of Turbine Oil (refer to Section 6, Supplemental Tools and Supplies) between the Sleeve (PL 4.9) and Spring (PL 4.5).
12. If a muffled fog horn noise is heard from the copy exit area, replace the Exit Roller (REP 10.8) (PL 6.2).
13. If a squeal or scrapping noise is heard from the copy exit area, the problem may be the cleaning blade in the Copy Cartridge.

CAUTION

Do not apply any lubricant to the photoreceptor. It will cause copy quality problems.

Remove the Copy Cartridge. Close the copier and cheat the Interlock Switch. Enter [4-1] and press the Start button. If the noise is gone, replace the Copy Cartridge (PL 5.5).



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3. IMAGE QUALITY REPAIR ANALYSIS PROCEDURES

Section Contents

For all Copy Quality defects when a status code is not displayed, go to the CQ1 Copy Defect Entry RAP. CQ1 Copy Defect Entry RAP will indicate the corrective action to perform or the RAP to use.

TITLE	PAGE
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CQ 2.1 Background (Overall) RAP	3-14
CQ 2.2 Background Bands (Lead Edge to Trail Edge) RAP	3-15
CQ 2.3 Background/Black Bands (Front Edge to Rear Edge) RAP	3-16
CQ 3 Black Border RAP	3-17
CQ 4 Black Copy RAP	3-17
CQ 5 Blank Copy RAP	3-17
CQ 6.1 Deletions (Random or Repetitive) RAP	3-18
CQ 6.2 Deletions (Lead Edge to Trail Edge) RAP	3-19
CQ 6.3 Deletions (Front Edge to Rear Edge) RAP	3-20
CQ 7 Light Copy RAP	3-21
CQ 8 Lines and Streaks RAP	3-22
CQ 9 Misregistration (Lead Edge) RAP	3-23
CQ 10 Residual Image RAP	3-24
CQ 11 Resolution RAP	3-24
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TITLE	PAGE
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CQ 16 Unfused Copy RAP	3-29
CQ 17 Wrinkled Copy RAP	3-29

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CQ 1, COPY DEFECT ENTRY RAP

Identify the copy quality defect in the descriptions below. Go to the indicated table and read the DEFINITION / SPECIFICATION column in order to verify that the problem exists, and then perform the corrective action that is listed in the CORRECTIVE ACTION column.

Copy Quality Defects:

- For Background, Black Border, Black Copy, Blank or nearly Blank Copy, or Deletion problems, go to Table 1.
- For Light Copy, Line, Streak, Magnification or Misregistration problems, go to Table 2.
- For Residual Image, Resolution, Skew, Skip, Smear, Smudge, Spot, or Strobed Image problems, go to Table 3.
- For Unfused Copy, Uneven Density, or Wrinkled Copy problems, go to Table 4.

Defect	Definition or Specification	Test Pattern	Corrective Action
BACKGROUND	<p>The non-image area of the copy is darker than the corresponding area of the original.</p> <p>Classify the background defect as overall (Figure 1), or as background bands from lead edge to trail edge (Figure 2), or as background bands between the front and rear edges of the copy (Figure 3).</p>	82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 2.1, Background (Overall) RAP. Go to CQ 2.2, Background Bands (Lead Edge to Trail Edge) RAP. Go to CQ 2.3, Background/Black Bands (Front Edge to Rear Edge) RAP.
BLACK BORDERS	A black border is present on the copies.	82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 3, Black Border RAP
BLACK COPIES	A black image covers the entire copy.	82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 4, Black Copy RAP
BLANK / NEARLY BLANK COPIES	The copy is white; there is no image or only a very faint image on the copy.	82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 5, Blank Copy RAP
DELETIONS	<p>There is an area of the copy that carries no toner image or a very faint toner image. The deleted areas may be any shape or may be randomly distributed over the copy.</p> <p>Classify the deletion defect as random or repetitive spots (Figure 4), or deletions in the lead edge to the trail edge direction (Figure 5), or as deletions in the front edge to rear edge direction (Figure 6).</p>	Dark Dusting	Go to CQ 6.1, Deletions (Random or Repetitive) RAP. Go to CQ 6.2, Deletions (Lead Edge to Trail Edge) RAP. Go to CQ 6.3, Deletions (Front Edge to Rear Edge) RAP.

Table 1. CQ1 Copy Defect RAP Tables

(continued)

Defect	Definition or Specification	Test Pattern	Corrective Action
LIGHT COPY	The .7 solid area density block nearest the center of the copy is equal to or greater than the 1.0 solid area density block on the test pattern. With the dark setting selected, the .10 line pair on the test pattern is partially or completely copied (Figure 7).	82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 7, Light Copy RAP.
LINES AND STREAKS	A dirty line, 1.0 mm wide or less, appears on the copy (Figures 8 and 9).	Customer Original or 82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 8, Lines and Streaks RAP.
MAGNIFICATION	The distance between the 100 mm mark and the 200 mm mark on the magnification scale of the copy must be within 100 mm \pm 0.8mm (Figure 10.)	82P524 - USCO, XCL 82P523 - RXL Side B	Check the Magnification (ADJ 6.2) SDF Magnification (ADJ 5.2)
MISREGISTRATION (LEAD EDGE)	The 10 mm line on the graduated mm scale must be 10 mm \pm 1.6 mm from the edge of the copy (Figure. 11).	82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 9, Misregistration (Lead Edge) RAP.
MISREGISTRATION (FRONT EDGE)	The 10 mm line on the graduated mm scale must be 10 mm \pm 1.6 mm from the front edge of the copy (Figure. 11).	82P524 - USCO, XCL 82P523 - RXL Side A	Perform the following: <ul style="list-style-type: none"> • With R/E: Check the Baseline Front-to-Rear Registration (R/E only) (ADJ 6.11) • W/O R/E: Check the Baseline Front-to-Rear Registration (1:1 only) (ADJ 6.14) • Check the Paper Tray Front-to-Rear Registration (ADJ 8.4). • With SDF: Check the SDF Front-to-Rear Registration and Skew (ADJ 5.1).

Table 2. CQ1 Copy Defect RAP Tables

(continued)

Defect	Definition or Specification	Test Pattern	Corrective Action
RESIDUAL IMAGE	An electrostatic or dry ink image is transferred to subsequent copies (Figure 12).	Customer Original or 82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 10, Residual Image RAP.
RESOLUTION	For a 100% magnification and above, both the horizontal and vertical 3.5 LP/mm arrays for the resolution targets should be resolved completely. For reductions of 64% to 100%, both the horizontal and vertical 2.5 LP/mm arrays for the resolution targets should be resolved completely (Figure 13).	82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 11, Resolution RAP.
SKEW	The difference between the two graduated mm scales on the copy must be equal to or less than 1.2 mm (Figure. 14).	82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 12, Skew RAP.
SKIPS / SMEARS	The 2.5 LP/mm target for a 100% copy should be completely resolved (Figure 15.)	82P524 - USCO, XCL 82P523 - RXL Side B	Go to CQ 13, Skips and Smears RAP.
SMUDGE	After image transfer, the toner image that is not yet fused is rubbed by any part of the machine or foreign material.	82P524 - USCO, XCL 82P523 - RXL Side B	Inspect the copy transport area between the transfer corotron and the fuser for the cause of this problem .
SPOTS	Dark toner spots adhere to non-image areas of the copy (Figure 16).	Customer Original or 82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 14, Spots RAP.
STROBED IMAGE	Dark and light areas from the front to the rear of the copy.	82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 2.3, Background/Black Bands RAP.

Table 3. CQ1, Copy Defect RAP Tables

(continued)

Defect	Definition or Specification	Test Pattern	Corrective Action
UNFUSED COPY	Gently rub the .7 patch four times with a paper towel (twice lead edge to trail edge and twice front edge to rear edge). The image must not smudge.	82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 16, Unfused Copy RAP.
UNEVEN DENSITY	Image darkness varies across the width of the copy.	Customer Original or 82P524 - USCO, XCL 82P523 - RXL Side A	Go to CQ 15, Uneven Density (Front Edge to Rear Edge) RAP.
WRINKLED COPY	The copy paper has a wrinkle.	Customer Original	Go to CQ 17, Wrinkled Copy RAP.

Table 4. CQ1, Copy Defect RAP Tables

(continued)

CQ 1, COPY DEFECT ENTRY RAP (continued)

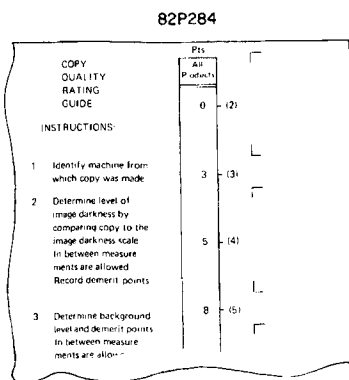


Figure 1. Background (Overall)

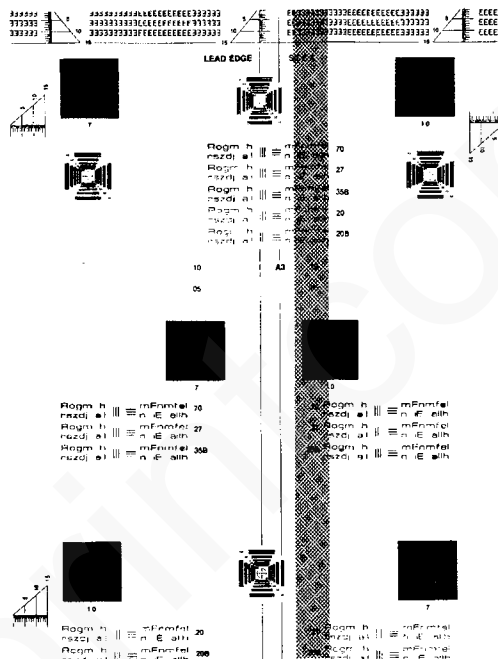


Figure 2. Background Bands Lead Edge to Trail Edge

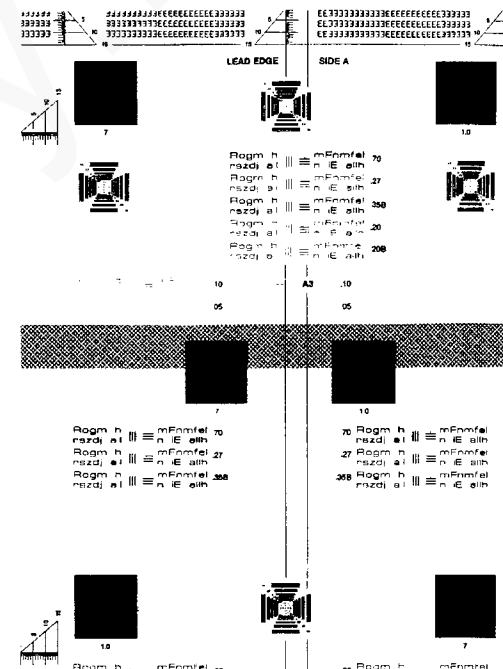


Figure 3. Background Bands Front Edge to Rear Edge



Figure 4. Deletions (Random)



Figure 5. Deletions Lead Edge to Trail Edge

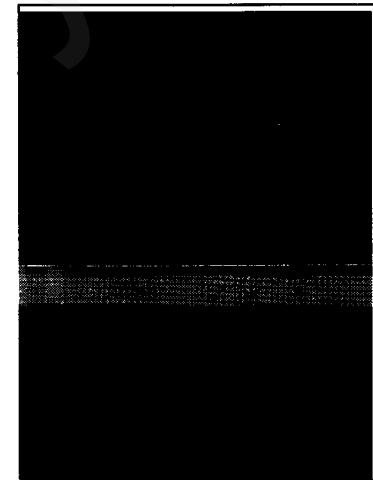
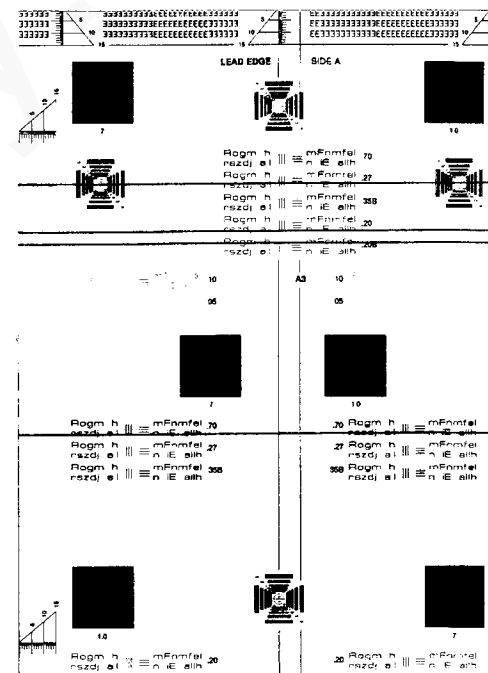
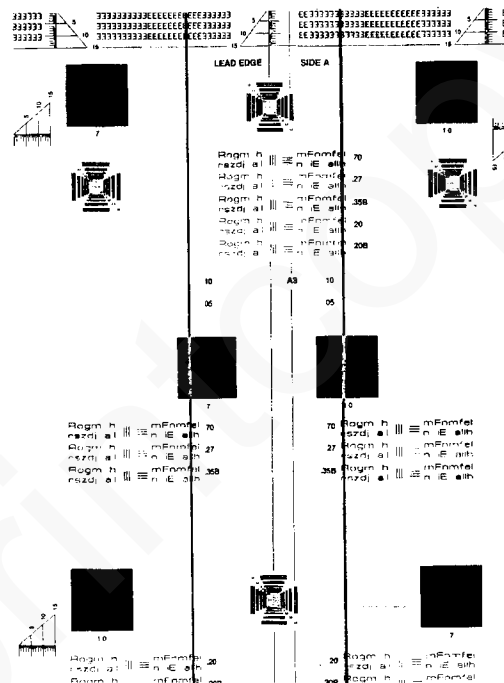
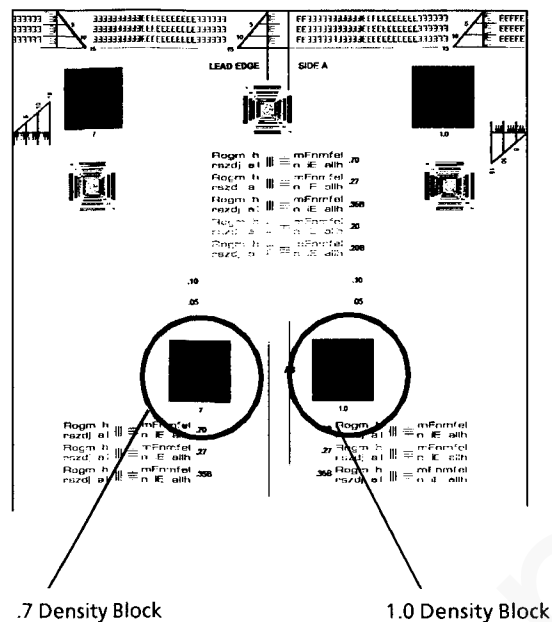


Figure 6. Deletions Front Edge to Rear Edge

CQ 1, COPY DEFECT ENTRY RAP (continued)



CQ 1, COPY DEFECT ENTRY RAP (continued)

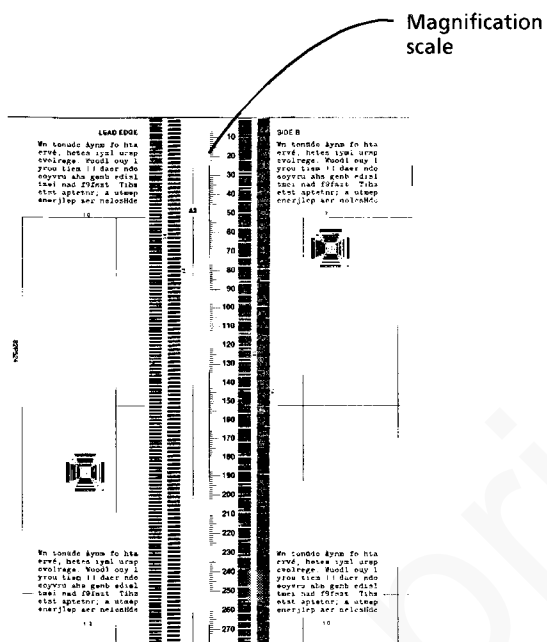


Figure 10. Magnification

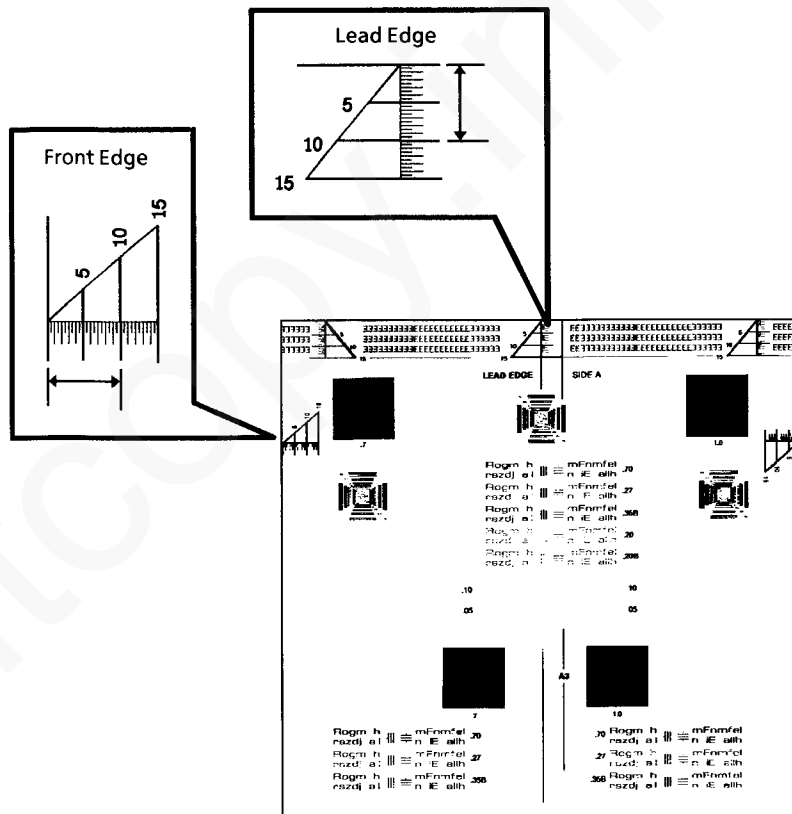


Figure 11. Misregistration

CQ 1, COPY DEFECT ENTRY RAP (continued)

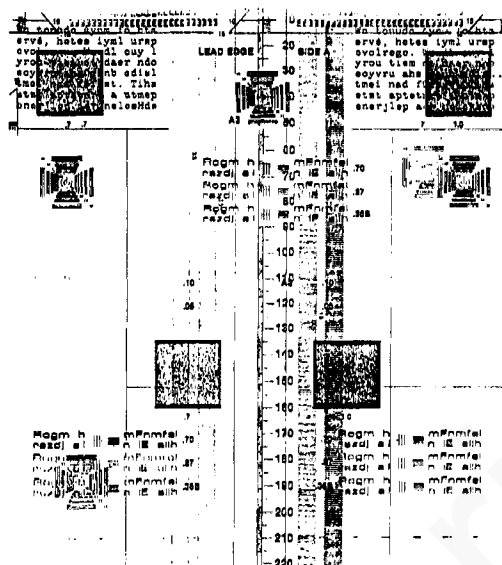


Figure 12. Residual Image

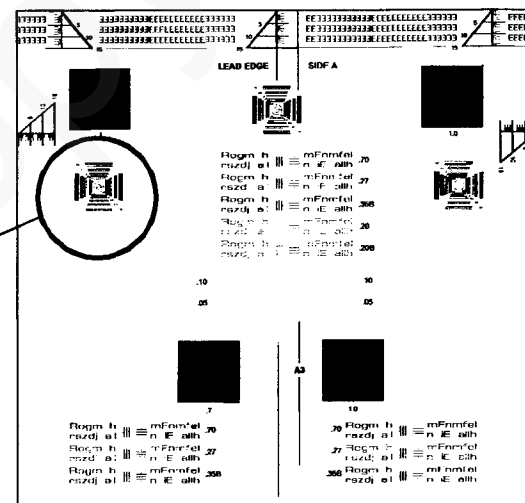


Figure 13. Resolution

CQ 1, COPY DEFECT ENTRY RAP (continued)

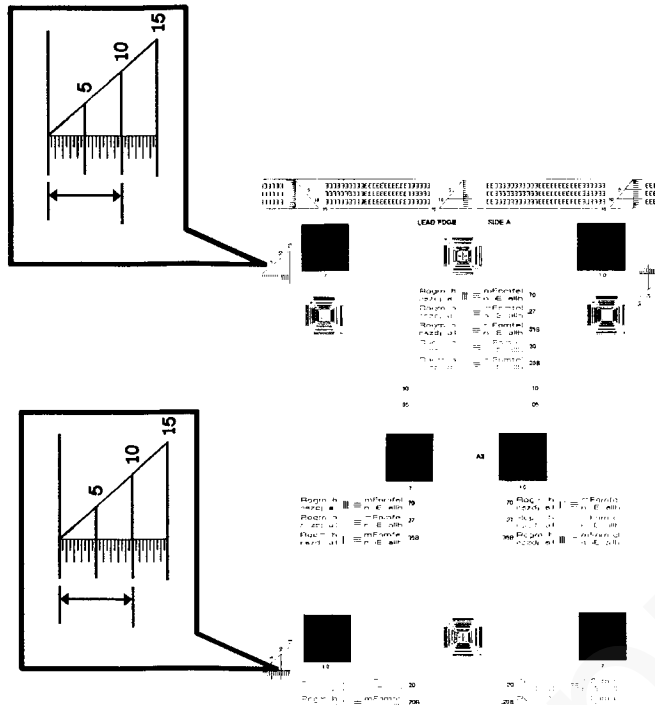


Figure 14. Skew

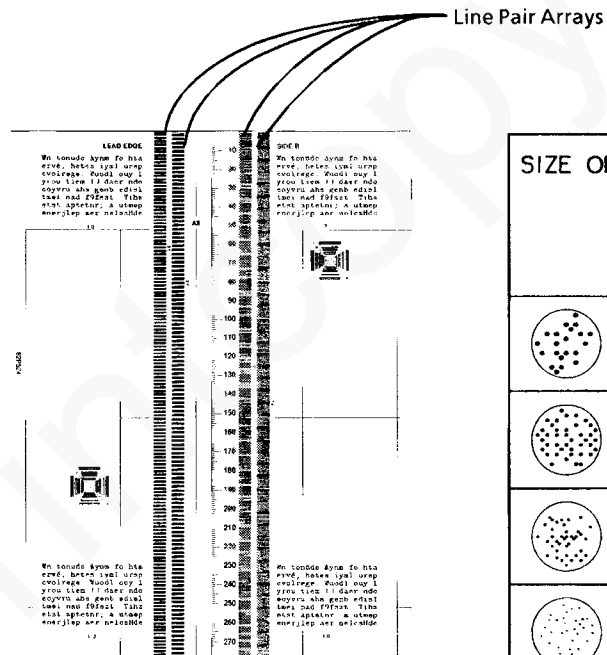


Figure 15. Skips and Smears





SIZE OF BACKGROUND SPOT	MAXIMUM ALLOWABLE SPOTS	
	ANY 2 INCH DIAMETER CIRCLE	8 1/2 X 11 COPY AREA
 .021" TO .030"	1	2
 .016" TO .020"	1	7
 .011" TO .015"	6	25
 .006" TO .010"	12	NOT SPECIFIED

Figure 16. Spots

CQ 2.1, BACKGROUND (OVERALL) RAP

INITIAL ACTION

Ensure that the Optics are clean.

PROCEDURE

Open the Front Cover, cheat the Interlock Switch, and make 5 copies. Observe the Auger Gears through the hole that is below the Dry Ink Cartridge. The gears rotate steadily.

Y N
Remove the Copy Cartridge. Cheat the interlock. Enter [9-6]. Observe the Discharge Lamps and press the Start button. All eight lamps are lit.

Y N
Go to the OF 9.1, Discharge Lamp RAP in Section 2.

Make one copy of Side A of the Standard Test Pattern with the Copy Quality control set at the darkest position and one copy with the Copy Quality control set at the lightest position. Examine the copies. The copy contrast varies between the two copies.

Y N
Enter [2-2] and check the copy darker and the copy lighter buttons. The buttons are good.

Y N
A B C

Go to the OF 9.5, Dry Ink Sensor RAP and check the wires of the Dry Ink Sensor for an open circuit.

A B C
Go to the OF 2.1, Copier Display / Dead Copier RAP in Section 2.

Replace the Main PWB (REP 1.5) (PL 1.2).

Go to the U8 RAP. Return here if the problem continues after performing the U8 RAP.

Check the Exposure Level (ADJ 6.1).

Replace the Developer (PL 5.2A).

Go to the OF 9.3, Developer Bias RAP in Section 2.

CQ 2.2, BACKGROUND BANDS (LEAD EDGE TO TRAIL EDGE) RAP

PROCEDURE

Perform the following as required until the problem is resolved.

1. Clean the Transfer / Detack Corotron (REP 9.1, 9.4).
2. Remove the Document Glass (REP 6.1). Inspect the optics for contamination. Clean the mirrors and lens.
3. Inspect the Exposure Lamp for discoloration. If it has dark areas that cannot be cleaned, replace the Exposure Lamp (REP 6.3) (PL 3.2).
4. Open the copier and cheat the interlock. Remove the copy cartridge. Enter [9-6] and press the **Start** button. Go to OF 9.1, Discharge Lamp RAP in Section 2 if all eight lamps are not lit.
5. Enter [9-7] and press the **Start** button. If the Edge Erase LED's do not illuminate in sequence, go to the OF 9-4, Edge Erase RAP.
6. Check the Copier Level (ADJ 1.1).
7. Remove the Developer Assembly (REP 9.3). Check the Developer Assembly Mag Roll for an even layer of Developer. Check the Mag Roll for damage. Replace the Mag Roll if required (PL 5.3). Check the Mag Roll Cam (ADJ 9.2).
8. Adjust the Exposure Lamp Shades (Baffles) (ADJ 6.13).
9. If the problem continues, replace the copy cartridge (PL 5.2A).
10. If the problem only occurs while using the SDF, clean the SDF Document Glass. Ensure that it is installed correctly (REP 5.11). Check the SDF Exposure (ADJ 5.3).

CQ 2.3, BACKGROUND / BLACK BANDS (FRONT EDGE TO REAR EDGE) RAP

INITIAL ACTION

Ensure that the Optics are clean.

PROCEDURE

NOTE: Examine the orientation of the copy in the Output Tray. The front edge of the copy is the edge that is toward the front of the copier as the copy exits the Fuser. The rear edge of the copy is the edge that is toward the rear of the copier as the copy exits the Fuser.

If the copy has fixed bands of background, go to the OF 9.3, Developer Bias RAP in Section 2.

If the copy has random bands of background, observe the Exposure Lamp as it is scanning.

If the Exposure Lamp flashes or dims, perform the following as required until the problem is resolved:

1. Go to the OF 6.2, Exposure Lamp RAP and check the wires for an intermittent circuit. If the wires are good, continue with this procedure.
2. Ensure that the Exposure Lamp is secured properly in the lamp contacts (REP 6.3).
3. Disconnect the Auto Exposure Sensor (PL 3.1A). Make 5 copies. If the copies are good, replace the Auto Exposure Sensor (PL 3.1A).

4. Replace the Exposure Lamp Overtemperature Fuse (REP 6.6) (PL 3.3).
5. Replace the Lamp Harness (PL 3.3).
6. Replace the Exposure Lamp (REP 6.3) (PL 3.3).
7. Replace the Input Power PWB (PL 1.3).

If the Exposure Lamp is OK, perform the following as required until the problem is resolved:

1. Check the mounting and connections of the Transfer / Detack Corotron (REP 9.1, 9.4).
2. Check the Fuser Roll and Pressure Roll for damage (PL 6.1, 6.2).
3. Replace the Copy Cartridge (PL 5.2A).
4. If the problem continues, replace the HVPS (REP 9.2) (PL 1.3).

CQ 3, BLACK BORDER RAP

PROCEDURE

Black border appears on the lead edge.

Y **N**
Make copies from Tray 1, Tray 2 (If tray 2 is present) and the Bypass Tray. Black border appears while using all the trays.

- Y** **N**
- Go to the tray that from which the problem occurs and check that the tray is seated correctly.
 - Adjust the Paper Tray Front-to-Rear Registration (ADJ 8.4).

Perform the following as required until the problem is resolved.

- Check the Baseline Front – to – Rear Registration:
With R/E: (ADJ 6.11)
With 1:1: (ADJ 6.14)
- R/E Only: Check Magnification (ADJ 6.2).
- Go to OF 9.4, Edge Erase Lamp RAP in Section 2.

Perform the following as required until the problem is resolved.

- Check the Lead Edge Deletion (ADJ 8.3).
- Check the Lead Edge Registration:
With R/E: (ADJ 8.5)
With 1:1: (ADJ 8.2)
- R/E Only: Check the Magnification (ADJ 6.2).

CQ 4, BLACK COPY RAP

PROCEDURE

Enter [6-4] and press the Start button. The Exposure Lamp illuminates.

Y **N**
Go to the OF 6.2, Exposure Lamp RAP in Section 2.

Perform the following as required until the problem is resolved.

- Check that the optics mirrors are seated correctly.
- Check the light path for obstructions.
- Go to CQ 2.1, Background (Overall) RAP.

CQ 5, BLANK COPY RAP

INITIAL ACTION

If the condition of the paper is unknown, load fresh paper.

PROCEDURE

Perform the following as required until the problem is resolved.

1. Check that the copier has Tag 2. If not, perform the Developer Assembly Pin repair (General Service Notes).
2. Ensure the Green Panel that is below the Dry Ink Cartridge is pushed in all the way so that the developer housing is positioned correctly.
3. Check the Transfer Corotron for secure mounting and contamination (REP 9.1, 9.4).
4. Check that the Mag Roll is rotating while the main drive is operating.
 - a. Remove the Copy Cartridge.
 - b. Enter [4-1] and press the Start button. Check that the mag roll rotates. Replace the Developer Housing (REP 9.3) (PL 5.2A) if the mag roll is stationary.
5. Perform GP 2 Optics / Xerographics Isolation Procedure (Section 6, Copier Procedures). If the problem is optics, check the Exposure Level (ADJ 6.1). Then go to the U8 RAP.
6. Ensure the harness for the HVPS is connected to the Lower PWB.
7. Switch off the copier. Disconnect and reconnect the P/Js on the Lower PWB.
8. Go to the OF 9.2, HVPS RAP in Section 2.

CQ 6.1, DELETIONS (RANDOM OR REPETITIVE) RAP

PROCEDURE

Perform GP2, Optics / Xerographics Isolation procedure. The problem is visible on the copy.

Y N

Perform the following as required until the problem is resolved.

- Remove the Document Glass (REP 6.1) and check the lens and mirrors for contamination.
- Clean the Document Glass.

Remove the Document Glass (REP 6.1) and the Lens Cover (REP 6.10). Check the position of the Light Shields. Check for damage (PL 3.2B).

If the deletion repeats every 24 mm, inspect the Pressure Roll for damage. Replace it as required (REP 10.6) (PL 6.2).

If the deletion repeats every 30 mm, inspect the Fuser Heat Roll (PL 6.1) and the Photoreceptor (PL 5.5) for damage. Replace them as required. If a mark is on the Photoreceptor, attempt to remove the mark with film remover and a swab.

If the deletion does not repeat every 24, or 30mm, perform GP1, Image on the Photoreceptor (Section 6). The problem is visible on the photoreceptor.

Y N

A B

A

B

Perform the following as required until the problem is fixed.

- Clean the Transfer/Detack Corotron (REP 9.1, 9.4).
- Check the Registration Buckle (ADJ 8.1).
- Replace the Feed / Transport Clutch (PL 2.3).
- Replace the copy paper with fresh paper.
- Replace the Transfer Corotron wire (PL 5.6).

NOTE: Use REP 9.5 only if the wire kit on PL 5.6 is not available.

Perform the following as required until the problem is fixed.

- Remove the Developer Assembly (REP 9.3). Check the Mag Roll for an even layer of developer material (PL 5.3). Replace the Mag Roll if it is damaged (PL 5.3).
- Check the Mag Roll Cam (ADJ 9.2).
- Remove the Developer Cartridge (REP 9.7). Check that the Developer satisfies the following conditions:
 - Covers most of the augers
 - Is not caked into chunks
 - Feels like it is primarily grit (carrier) and not Dry Ink (powder)

If the Developer does not satisfy the conditions above, replace the Developer (REP 9.8) (PL 5.2A).

- Replace the Dry Ink cartridge.

CQ 6.2, DELETIONS (LEAD EDGE TO TRAIL EDGE) RAP

INITIAL ACTION

- Clean the Transfer/Detack Corotron (REP 9.1, 9.4).

NOTE: Examine the orientation of the copy in the receiving tray. The lead edge of the copy is the edge that is first to exit the fuser. The trail edge of the copy is the edge that is last to exit the fuser.

- If the deletion is across the lead edge, check the Lead/Trail Edge Deletion (ADJ 8.3).

PROCEDURE

Perform GP2, Optics/Xerographics Isolation procedure. The problem is visible.

- | | |
|---|--|
| Y | N |
| | Perform the following as required until the problem is resolved. |
| | <ul style="list-style-type: none">● Remove the Document Glass (REP 6.1).● Check the optics for contamination.● Clean the Document Glass.● Remove the Document Glass (REP 6.1) and the Lens Cover (REP 6.10). Check the position of the Light Shields. Check for damage (PL 3.2B). |

If the deletion appears as lines or bands that align with the Fuser Stripper fingers or the Thermistor, inspect the Stripper Fingers and Thermistor for contamination or damage. Clean or replace as required (PL 6.1).

A

A

Open the copier and cheat the interlock. Enter [9-6]. Observe the Discharge Lamp and press the Start and Stop button several times. The 8 discharge lamps switch on and off each time a button is pressed.

Y	N
	Go to OF 9.1, Discharge Lamp RAP in Section 2.

Perform GP1, Image on the Photoreceptor (Section 6). The deletion appears on the photoreceptor.

Y	N
	Perform the following as required until the problem is resolved.
	<ul style="list-style-type: none">● Check the Pressure Roll for defects that align with the copy defects (PL 6.2).● Replace the Transfer / Detack Corotron wire (PL5.6). <i>NOTE: Use REP 9.5 only if the wire kit on PL 5.6 is not available.</i>

C

C

Perform the following as required until the problem is resolved.

- Remove the developer housing and check the magnetic roll for foreign material such as a staple or a piece of paper (clean as required).

- Inspect the photoreceptor for contaminants or other foreign materials.

- Replace the Copy Cartridge (PL 5.5).

- If the deletions are in random positions, remove the Developer Cartridge (REP 9.7). Check that the Developer satisfies the following conditions:

- Covers most of the augers

- Is not caked into chunks

- Feels like it is primarily grit (carrier) and not Dry Ink (powder)

If the Developer does not satisfy the conditions above, replace the Developer (PL 5.2A).

CQ 6.3, DELETIONS (FRONT EDGE TO REAR EDGE) RAP

INITIAL ACTION

Clean the Transfer/Detack Corotron (REP 9.1, 9.4).

PROCEDURE

NOTE: Examine the orientation of the copy in the Receiving Tray. The lead edge is first to exit the copier. The front edge of the copy is the edge that aligns with the front of the copier as the copy exits the Fuser. The rear edge of the copy is the edge that aligns with the rear of the copier as the copy exits the Fuser.

If image deletion is along the lead edge and is more than 4 mm from the lead edge of a 100% copy, or a 1:1 copy check the Lead Edge Registration, with R/E (ADJ 8.5), with 1:1 (ADJ 8.2).

Perform GP2, Optics/Xerographics Isolation procedure. The problem is visible.

Y N

The problem is in the optics. Perform the following as required until the problem is resolved.

- Remove the Document Glass (REP 6.1).
- Check the optics for contamination.
- Clean the Document Glass.

A

A

Perform GP1, Image on Photoreceptor procedure (Section 6). The deletion appears on the photoreceptor

Y N

Perform the following as required until the problem is resolved.

- Replace the Transfer / Detack Corotron wire (PL 5.6).

NOTE: Use REP 9.5 only if the wire kit on PL 5.6 is not available.

- Go to the OF 9.2, HVPS RAP in Section 2.

Perform the following as required until the problem is resolved.

- Check the electrical contacts on the copy cartridge and the contacts on the HVPS for damage or contamination. Reform and clean the contacts as necessary.
- Check that the Developer Assembly is seated correctly and that the green panel on the Developer Assembly is pushed in all the way.
- Replace the Copy Cartridge (PL 5.5).
- Go to the OF 9.2, HVPS RAP in Section 2.

CQ 7, LIGHT COPY RAP

INITIAL ACTION

Clean the Transfer/Detack Corotron (REP 9.1, 9.4).

PROCEDURE

Perform GP2, Optics/Xerographics Isolation procedure (Section 6). **The problem is visible.**

Y

N

Perform the following as required until the problem is resolved:

- Go to the U8 RAP in Section 2. Return here if the problem continues after performing the U8 RAP.
- Check the Exposure Level (ADJ 6.1).
- Switch off and switch on the copier. Make a copy and observe that at the end of the scan cycle the Exposure Lamp switches off and on and off again. Replace the Main PWB (REP 1.5) (PL1.2) if this action is not observed.

A

A

Perform the following as required until the problem is fixed.

- Check that the ground on the Developer Housing is secure.
- Check that the copier has Tag 2. If not, perform the Developer Assembly Pin repair (General Service Notes).
- Make 5 copies of side A of the test pattern. If the Auger Gears do not rotate, go to the J1 RAP in Section 2.
NOTE: The Auger Gears are visible through the Toner Hopper hole that is below the Dry Ink Cartridge.
- Replace the Developer (REP 9.8) (PL 5.2A).
- Go to the OF 9.3, Developer Bias RAP and return here if the problem continues.
- Go to the OF 9.2, HVPS RAP in Section 2.

CQ 8, LINES AND STREAKS RAP

INITIAL ACTION

- Ensure that the optics are clean and free of any obstructions.
- If lines appear in solid areas from lead edge to trail edge, and the copy cartridge has close to the expected number of copies, replace the copy cartridge (PL 5.5).

PROCEDURE

Open the copier. Check that the Stripper Fingers are moved away from the Photoreceptor. If the Stripper Fingers are touching the Photoreceptor, go to the OF 9.7, Stripper Finger Solenoid RAP. Perform GP1, Image on the Photoreceptor procedure (Section 6). Perform the step if the bolded statement describes the condition.

1. **If the line or streak appears on the photoreceptor**, remove the Developer Assembly (REP 9.3). Check for an even layer of developer on the Mag Roll. Check the Mag Roll for damage or the presence of foreign material. Repair or replace as required (PL 5.3). If no problems are found with the Developer Assembly, replace the copy cartridge (PL 5.5).
2. **If the line appears on edge of copy**, go to CQ 3, Black Border RAP.
3. **If the line or streak does not appear on the photoreceptor**, check the following.
4. **If the line or streak aligns with the fuser Stripper Fingers or the Thermistor**, inspect the stripper fingers and thermistor for contamination or damage, and for damage they may have caused to the Fuser Heat Roll. Clean or replace them, as required (PL 6.1).

5. **If the line or streak does not align with the fuser Stripper Fingers or the thermistor**, inspect the paper path from the Transfer Corotron to the Output Tray for toner buildup in an area that aligns with the line or streak on the copy. Clean or repair the affected component, as required (PL 6.2).

6. **If the lines align with the Transfer Corotron paper guides**, clean the Transfer/Detack Corotron (REP 9.1, 9.4). If the problem continues, replace the Transfer Corotron wire (PL5.6).

NOTE: Use REP 9.5 only if the wire kit on PL 5.6 is not available.

CQ 9, MISREGISTRATION (LEAD EDGE) RAP

PROCEDURE

NOTE: Examine the orientation of the copy in the receiving tray. The lead edge of the copy is the edge that is first to exit the fuser. The trail edge of the copy is the edge that is last to exit the fuser.

Register side A of the test pattern on the Document Glass. Select Tray 1 and make a copy, select the Bypass Tray and make a copy, and if present, select Tray 2 and make a copy. **There is misregistration on one or more of the copies.**

Y N

The SDF is causing misregistration.
Perform the following:

- Clean the SDF Registration Clutch with film remover (USCO) or general cleaning solvent (RX) (PL 8.4).
- Remove the SDF Drives Cover (REP 5.2). Check that the hardware and drive components are installed correctly.
- Check that the SDF Registration Guide is installed correctly (REP 5.10).
- Check the SDF Registration (ADJ 8.6).
- Check the Left and Right Counterbalances (PL 8.1) and Left and Right Supports (PL 3.1B) for damage or failure.

Perform the step if the bolded statement describes the condition.

A

A

1. If misregistration occurs only from the **Bypass Tray**, perform the following:
 - Ensure that paper is being loaded properly.
 - Inspect the paper path from this tray for an obstruction, such as a burr.
 - Check the retard roll for binding. Repair the roll or gears, as required (PL 4.9, 4.10, 4.11).
2. If misregistration occurs only from trays 1 or 2, perform the following:
 - Ensure that the paper feed roller is clean.
 - Inspect the paper path from the defective tray for an obstruction, such as a burr.
 - Check the Tray 1 Feed Clutch (PL 4.5) or Tray 2 Feed Clutch (PL 4.7) for binding. Clean or replace the clutch, as necessary.
3. If misregistration occurs from all the trays, perform the following:
 - Clean the Registration Roll (PL 4.11).
 - Inspect the paper registration area for an obstruction such as a burr.
 - Ensure that the Registration Clutch is not energized when the copier is in the standby mode. Go to the E1 RAP if the clutch is energized.
 - Check the Lead Edge Registration:
With 1:1, ADJ 8.2
With R/E, ADJ 8.5.
 - Check the Registration Buckle (ADJ 8.1).
 - Replace the Feed / Transport Clutch (PL 2.3).
 - Replace the Registration Clutch (PL 4.11).

CQ 10, RESIDUAL IMAGE RAP

PROCEDURE

Remove the Copy Cartridge. Cheat the interlock. Enter [9-6]. Observe the Discharge Lamps and press the **Start** button. All the lamps are lit.

Y **N**

Go to OF 9.1, Discharge Lamp RAP in section 2.

Perform GP1 Image on the Photoreceptor procedure (Section 6). The residual image appears on the photoreceptor.

Y **N**

Perform the following as required until the problem is resolved.

- Inspect the Fuser Heat Roll (REP 10.3) and the Pressure Roll (REP 10.6) for contamination or damage. Clean or replace them as required (PL 6.1, 6.2).
- Ensure that the surface of the thermistor is clean and that it is positioned correctly against the Fuser Heat Roll.
- Replace the Developer (REP 9.8) (PL 5.2A).

Perform the following as required until the problem is resolved.

- Replace the Copy Cartridge (PL 5.5).
- Replace the Developer (REP 9.8) (PL 5.2A).

CQ 11, RESOLUTION RAP

INITIAL ACTION

- Replace the copy paper with a new supply.
- Ensure that the optics are clean.
- Ensure that the 4/5 Mirror shipping screw is removed.

PROCEDURE

WARNING

ACH is applied to the Optics Heater when the copier is switched off. Disconnect the power cord to avoid electrical shock.

Perform the following as required until the problem is resolved.

- Ensure that the mirror 4/5 carriage is installed correctly with no loose hardware.
- Remove the Document Glass (REP 6.1) and Lens Cover (REP 6.10).
Record the number on the lens tag.
Enter [20-3] and ensure that the numbers are the same.
Clean the bottom of the Document Glass.
- Adjust the Resolution:
With R/E, ADJ 6.12
With 1:1, ADJ 6.15
- **With R/E**, check the Mirror 4/5 Cam Alignment (ADJ 6.6).
- Check the Full Rate and Half Rate Carriage (ADJ 6.7).

CQ 12, SKEW RAP

PROCEDURE

Register side A of the test pattern on the document glass and make a copy. There is skew in the copy.

- | | | | | | |
|--|--|---|---|---|---|
| Y | N | | | | |
| <p>The SDF is skewing the document. Perform the following as required until the problem is resolved.</p> <ul style="list-style-type: none"> • Check that the SDF registration guide is installed correctly on the SDF document glass. • Check that the SDF counterbalances are seated correctly, and the housings are not cracked in the pivot pin area. Check that the SDF has Tag 3 installed. • Check the following for loose hardware, binding, missing, or broken parts, or contamination with dirt or grease: <ul style="list-style-type: none"> • The SDF Registration Pinch Roll and the front and rear pinch roll Springs (PL 8.4) • The spring loaded Guide and SDF Takeaway Roll that is above the SDF Pinch Rollers • The Document Guide • Check that the SDF Registration Pinch Roll can be pushed down and returns to form a nip with the SDF Registration Roll (PL 8.4). Ensure that the front and rear springs are in position on the bearings. • Remove the SDF Drives Cover (REP 5.2) and check the drive components for the conditions above (PL 8.2 - 8.4). If no problems are found, perform the SDF Front-to-Rear Registration and Skew adjustment (ADJ 5.1). | <p>The skew occurs only from trays 1 and/or 2.</p> <table border="0"> <tr> <td style="vertical-align: top; width: 50px;">Y</td> <td style="vertical-align: top; width: 50px;">N</td> </tr> <tr> <td style="vertical-align: top;"> <p>The skew occurs only from the Bypass Tray. Perform the following as required until the problem is resolved.</p> <ul style="list-style-type: none"> • Ensure that the bypass guide is set to the correct width of the copy paper. • Ensure that the bypass tray is installed correctly (REP 7.2). • Inspect the paper path from this tray for an obstruction, such as a burr or other similar condition. • Check for loose paper feed and drive components (PL 4.8 - 4.10). </td> <td style="vertical-align: top;"> <p>Perform the following as required until the problem is resolved:</p> <ul style="list-style-type: none"> • Ensure that the paper guides are set to the correct width and length of the copy paper. </td> </tr> </table> | Y | N | <p>The skew occurs only from the Bypass Tray. Perform the following as required until the problem is resolved.</p> <ul style="list-style-type: none"> • Ensure that the bypass guide is set to the correct width of the copy paper. • Ensure that the bypass tray is installed correctly (REP 7.2). • Inspect the paper path from this tray for an obstruction, such as a burr or other similar condition. • Check for loose paper feed and drive components (PL 4.8 - 4.10). | <p>Perform the following as required until the problem is resolved:</p> <ul style="list-style-type: none"> • Ensure that the paper guides are set to the correct width and length of the copy paper. |
| Y | N | | | | |
| <p>The skew occurs only from the Bypass Tray. Perform the following as required until the problem is resolved.</p> <ul style="list-style-type: none"> • Ensure that the bypass guide is set to the correct width of the copy paper. • Ensure that the bypass tray is installed correctly (REP 7.2). • Inspect the paper path from this tray for an obstruction, such as a burr or other similar condition. • Check for loose paper feed and drive components (PL 4.8 - 4.10). | <p>Perform the following as required until the problem is resolved:</p> <ul style="list-style-type: none"> • Ensure that the paper guides are set to the correct width and length of the copy paper. | | | | |

A

A
Perform GP3, Processor Skew Isolation Procedure in Section 6. There is an Optics problem.

- | | | | | | |
|---|--|---|---|---|---|
| Y | N | | | | |
| <p>The skew occurs from all the trays.</p> | <p>The skew occurs only from trays 1 and/or 2.</p> <table border="0"> <tr> <td style="vertical-align: top; width: 50px;">Y</td> <td style="vertical-align: top; width: 50px;">N</td> </tr> <tr> <td style="vertical-align: top;"> <p>The skew occurs only from the Bypass Tray. Perform the following as required until the problem is resolved.</p> <ul style="list-style-type: none"> • Ensure that the bypass guide is set to the correct width of the copy paper. • Ensure that the bypass tray is installed correctly (REP 7.2). • Inspect the paper path from this tray for an obstruction, such as a burr or other similar condition. • Check for loose paper feed and drive components (PL 4.8 - 4.10). </td> <td style="vertical-align: top;"> <p>Perform the following as required until the problem is resolved:</p> <ul style="list-style-type: none"> • Ensure that the paper guides are set to the correct width and length of the copy paper. </td> </tr> </table> | Y | N | <p>The skew occurs only from the Bypass Tray. Perform the following as required until the problem is resolved.</p> <ul style="list-style-type: none"> • Ensure that the bypass guide is set to the correct width of the copy paper. • Ensure that the bypass tray is installed correctly (REP 7.2). • Inspect the paper path from this tray for an obstruction, such as a burr or other similar condition. • Check for loose paper feed and drive components (PL 4.8 - 4.10). | <p>Perform the following as required until the problem is resolved:</p> <ul style="list-style-type: none"> • Ensure that the paper guides are set to the correct width and length of the copy paper. |
| Y | N | | | | |
| <p>The skew occurs only from the Bypass Tray. Perform the following as required until the problem is resolved.</p> <ul style="list-style-type: none"> • Ensure that the bypass guide is set to the correct width of the copy paper. • Ensure that the bypass tray is installed correctly (REP 7.2). • Inspect the paper path from this tray for an obstruction, such as a burr or other similar condition. • Check for loose paper feed and drive components (PL 4.8 - 4.10). | <p>Perform the following as required until the problem is resolved:</p> <ul style="list-style-type: none"> • Ensure that the paper guides are set to the correct width and length of the copy paper. | | | | |

B

C

D

B

C

D

- Inspect the paper path from this tray for an obstruction, such as a burr.
- Inspect the paper feed components for contamination, wear, or loose components. Clean or replace the components as required (PL 4.3, PL 4.4, PL 4.5, PL 4.6, PL 4.7).
- Remove the Bypass Tray Assembly (REP 7.2). Ensure that the 6 guides are free of damage. Ensure that the Bypass Tray is pushed in all the way after installation.

Perform the following as required until the problem is resolved.

- Inspect the paper registration area for an obstruction, such as a burr.
- Inspect the registration roll for nicks or burrs. Clean or replace the roll as required (PL 4.11).

Perform the following as required until the problem is resolved.

- Check that the Registration Guide is installed correctly and is not damaged (PL 7.2).
- Check the optics components for loose hardware (PL 3.1A -3.5).
- Mirror 4/5 Cam Alignment (ADJ 6.6)
- Full Rate and Half Rate Carriage Parallelism (ADJ 6.7)
- Mirror 4/5 Carriage Level (ADJ 6.10)

CQ 13, SKIPS AND SMEARS RAP

PROCEDURE

Perform GP1, Image on the Photoreceptor procedure (Section 6).

The defect appears on the photoreceptor.

Y **N**
This indicates that the problem occurs during transfer. Examine the copies you made for analysis when you enter CQ1.

The smears repeat at a fixed interval.

Y **N**
The smears occur randomly or at the same location. Perform the following as required until the problem is resolved.

- Check the Transport Belts and Roller Shafts for contamination or wear (PL 6.2).
- Check the Registration Buckle (ADJ 8.1).
- Ensure that the paper weight meets specification.
- Clean the Transfer /Detack Corotron (REP 9.1, 9.4).
- Check the condition of the fuser rolls. If the Fuser Heat Roll (REP 10.3) (PL 6.1) or Pressure Roll (REP 10.6) (PL 6.2) is worn, damaged, or contaminated, replace them.
- Replace the Transfer Corotron wire (PL5.6).

NOTE: Use REP 9.5 only if the wire kit on PL 5.6 is not available.

A **B**
Perform the following as required until the problem is resolved.

- Inspect the gears that provide drive to the fuser for contamination or wear. Clean or replace them, as required (PL2.2).
- Inspect the gears that provide drive to the Registration Roll for wear or contamination. Clean or replace them, as required (PL2.1, 2.2).
- Ensure the copier closes securely (PL 4.8).
- Check the condition of the fuser rolls. If the Fuser Heat Roll (REP 10.3) (PL 6.1) or Pressure Roll (REP 10.6) (PL 6.2) is worn, damaged, or contaminated, replace them.

This indicates that the problem occurs before transfer. Examine the copies you made for analysis when you enter CQ1. The skips occur at the same location on every copy.

Y **N**
The skips repeat at a fixed interval.

Y **N**
The skips occur randomly. Perform the following as required until the problem is resolved.

- Inspect the scan drive gears and cables for contamination or wear. Clean or replace them, as required (PL 3.1A, 3.1B).
- Check the Scan Drive Motor [6-1] for smooth operation. Replace it, as required (PL3.1B).

C **D**
Perform the following as required until the problem is resolved:

- Inspect the gears that provide drive to the copy cartridge for contamination or wear. Clean or replace them, as required (PL 2.1).
- Inspect the scan drive components for contamination or wear. Clean or replace them, as required (PL3.1A, 3.1B).
- Clean the Scan Rails with a dry cloth. Apply a thin film of grease to the Scan Rails.
- Ensure the scan drive cables and pulleys are free of contamination or wear (PL 3.1A).
- Ensure the Lens Cover is installed correctly (REP 6.10).
- Ensure the Lamp Harness for the Exposure Lamp is free from obstructing movement of the optics components (PL 3.3).

CQ 14, SPOTS RAP

PROCEDURE

Perform the step if the bolded statement describes the condition.

1. If the spots occur in the same location on every copy, ensure that the spots are not on the document. Inspect and clean the two sides of the Document Glass (REP 6.1).
2. If the spots do not occur in the same location on every copy, perform GP1 Image on the Photoreceptor procedure (Section 6).
3. If the spots appear on the Photoreceptor, try to wipe the defect off the Photoreceptor with a swab and film remover.
4. If the defect cannot be wiped off the Photoreceptor, replace the Copy Cartridge (PL 5.5).

5. If the defect can be wiped off the photoreceptor, perform the following:

- Remove the Developer Cartridge (REP 9.7). Check that the Developer satisfies the following conditions:
 - Covers most of the augers
 - Is not caked into chunks
 - Feels like it is primarily grit (carrier) and not Dry Ink (powder)

If the Developer does not satisfy the conditions above, replace the Developer (REP 9.8) (PL 5.2A).

- Inspect the Dry Ink cartridge area and toner material for contamination. Replace the dry ink cartridge as required.

Check the Developer Assembly for worn components that are adjacent to the photoreceptor (REP 9.3).

- Clean the Transfer /Detack Corotron (REP 9.1, 9.4).
- Replace the Transfer Corotron wire (PL 5.6).

NOTE: Use REP 9.5 only if the wire kit on PL 5.6 is not available.

6. If the spots do not appear on the photoreceptor, perform the following:

- Inspect the paper path from the transfer corotron to the Output Tray for toner build-up on a component which aligns with the spots on the copy. Clean or repair it as required.
- Inspect the Stripper Fingers and Thermistor for contamination or damage, and for damage they may have caused to the Fuser Heat Roll. Clean or replace them as required (PL 6.1, 6.2)
- Check the Pressure Roll for contamination or damage. Clean or replace the roll as required (REP 10.6) (PL 6.2).
- Check for leakage of developer material around the Developer Assembly. Replace the Developer Assembly (PL 5.2A).

CQ 15, UNEVEN DENSITY (FRONT EDGE TO REAR EDGE) RAP

NOTE: Examine the orientation of the copy in the Output Tray. The front edge of the copy is the edge that aligns with the front of the copier as the copy exits the Fuser. The rear edge of the copy is the edge that aligns with the rear of the copier as the copy exits the Fuser.

INITIAL ACTION

- Swing out the Dry Ink cartridge and ensure that the Edge Erase Support is not loose and is positioned correctly on the front frame of the copier (PL 5.5).
- Change the paper supply in the paper tray.

PROCEDURE

Perform GP2, Optics/Xerographic Isolation Procedure in Section 6. Perform the step if the bolded statement describes the condition.

1. If the problem is in the **Optics**, perform the following.
 - Inspect the optics for contamination.
 - Inspect the Exposure Lamp for discoloration. If it has dark areas that cannot be cleaned, replace the Exposure Lamp (REP 6.3) (PL 3.3).
 - Adjust the Exposure Lamp Shades (Baffles) (ADJ 6.13). If the shades are adjusted, check the Exposure Level (ADJ 6.1).

2. If the problem is in the **Xerographics**, perform the following.

- Check that the Edge Erase assembly is supported by the screw (REP 14.5).
- Open the front cover and check if the Green Panel can be pushed in slightly. If it can be pushed in slightly, push it in and close the front cover. Instruct the customer to be sure they push in the Green Panel after changing the Dry Ink.
- Check that the copier has Tag 2. If not, perform the Developer Assembly Pin repair (General Service Notes).
- Check the Copier Level (ADJ 1.1).

If the problem continues, perform GP1 Image on the Photoreceptor procedure (Section 6). Perform the step if the bolded statement describes the condition.

3. If the **density appears uneven on the photoreceptor**, replace the Copy Cartridge (PL 5.5). If the problem continues, replace the Dry Ink cartridge.
4. If the **density appears even on the Photoreceptor**, clean the Transfer / Detack Corotron (REP 9.1, 9.4). If the problem continues, replace the Transfer Corotron wire (PL 5.6).
NOTE: Use REP 9.5 only if the wire kit on PL 5.6 is not available.

CQ 16, UNFUSED COPY RAP

PROCEDURE

1. Replace the copy paper with a new supply.
2. Ensure that the Pressure Roll is installed correctly and that the pressure roll bearing collars are installed correctly (REP 10.6).
3. Check the Fuser Temperature (ADJ 10.1).
Raise the temperature if the check indicates that the temperature is within the normal range.
4. Replace the Fuser Heat Rod, HTR1 (REP 10.2) (PL 6.1).
5. Replace the Thermistor, RT1 (REP 10.5) (PL 6.1).
6. Remove the Developer Cartridge (REP 9.7). Check that the Developer satisfies the following conditions:
 - Covers most of the augers
 - Is not caked into chunks
 - Feels like it is primarily grit (carrier) and not Dry Ink (powder).If the Developer does not satisfy the conditions above, replace the Developer (PL 5.2A).

CQ 17, WRINKLED COPY RAP

PROCEDURE

1. Check that the Pressure Roll is installed correctly (REP 10.6). Check that both the front and the rear supports for the Pressure Roll Bearings can be pushed down and will move up when released.
2. Check the Fuser Pressure Springs that push down on the Fuser cover when the copier is closed. Repair as required (PL 1.2).
3. Check that the Registration Roll is installed correctly. Repair as required (PL 4.11).
4. If the problem occurs while making two-sided copies, ensure that the copy paper is at least 80 gm² or 20 lb. and that the lead edge of the side-one copy is positioned to the right in the Bypass Tray, so that it will be the trail edge of the side-two copy.
NOTE: Side two copies should be run in the Bypass Tray only.
5. If the wrinkle is from side to side, check the Registration Buckle (ADJ 8.1). If the problem continues, replace the Feed / Transport Clutch (PL 2.3).

6. Replace the Cleaner Roll (REP 10.7) (PL 6.2).
7. Check the condition of the fuser rolls. If the Fuser Heat Roll (REP 10.3) (PL 6.1) or Pressure Roll (REP 10.6) (PL 6.2) is worn, damaged, or contaminated, replace them.

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REP 1.1 Main Power Switch (S1)

Parts List on PL 1.2

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Left Cover (REP 14.2).
3. Remove the Main Power Switch (Figure 1).

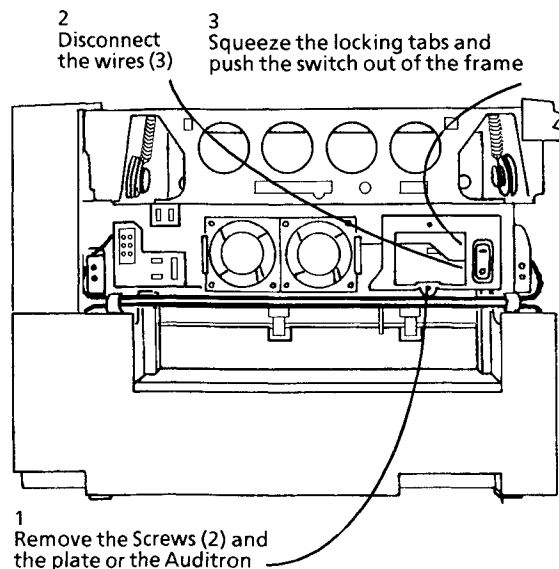


Figure 1. Removing the Main Power Switch

Replacement

1. Install the connectors on the switch as shown (Figure 2).

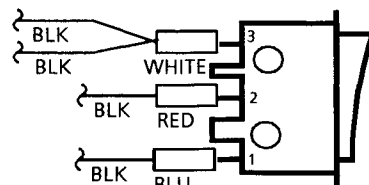


Figure 2. Main Power Switch Connections

REP 1.2 Input Power PWB

Parts List on PL 1.3

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Upper Rear Cover (REP 14.3).
3. Remove the Lower Rear Cover (REP 14.4).
4. Remove the Input Power PWB (Figure 1).

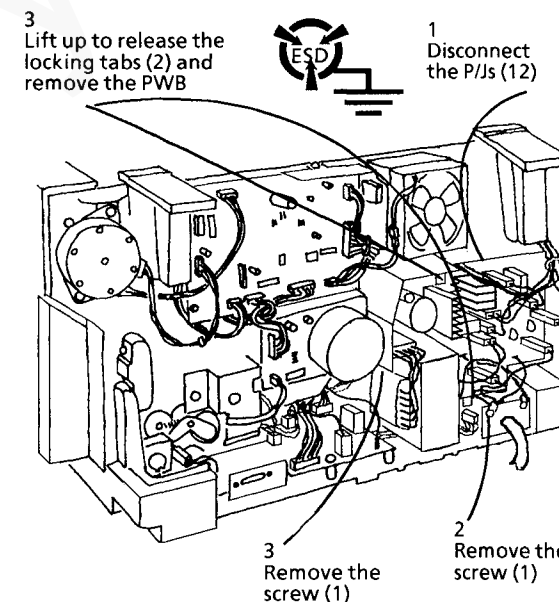


Figure 1. Removing the Input Power PWB

REP 1.3 Interlock Switch (S2)

Parts List on PL 1.2

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Developer Housing (REP 9.3).
3. Remove the Photoreceptor Module.
4. Remove the Fuser Assembly (REP 10.1).
5. Remove the Front Inner Cover (REP 14.5).
6. Remove the screws from the front frame and free the harness (Figure 1).

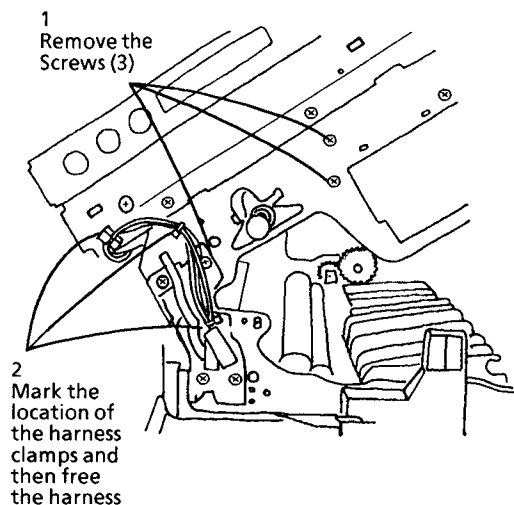


Figure 1. Removing the Screws

7. Remove the Upper Rear Cover (REP 14.3).

8. Prepare to remove the Interlock Assembly (Figure 2).

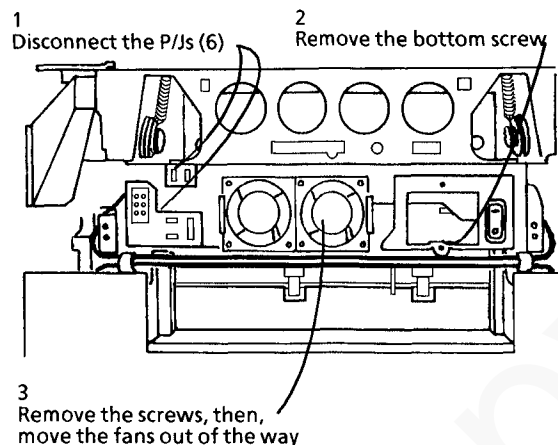


Figure 2. Preparing to Remove the Interlock Assembly

9. Remove the screws (3) from the rear frame (Figure 3).

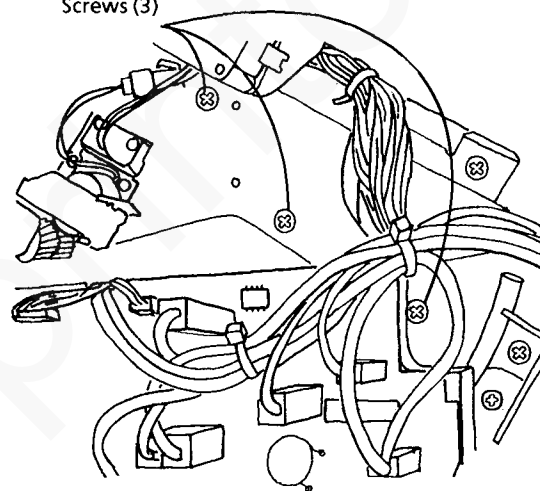


Figure 3. Removing the Screws

10. Move the Interlock Assembly to the right and down (as viewed from the front) in order to remove it.

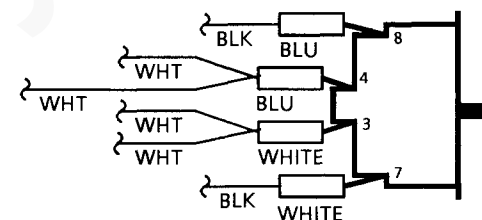
CAUTION

The actuator for the Exit Switch and the Star Wheels (3) can be damaged if the Interlock Assembly is removed carelessly.

11. Remove the screws that secure the black cooling duct to the Interlock Assembly and remove the cooling duct.
12. Remove the Interlock Switch.

Replacement

1. Install the connectors on the switch as shown (Figure 4).



INTERLOCK SWITCH S2

Figure 4. Interlock Switch Connections

REP 1.4 Main Transformer (T1)

Parts List on PL 1.3

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Lower Rear Cover (REP 14.4)
3. Remove the Main Transformer (Figure 1).

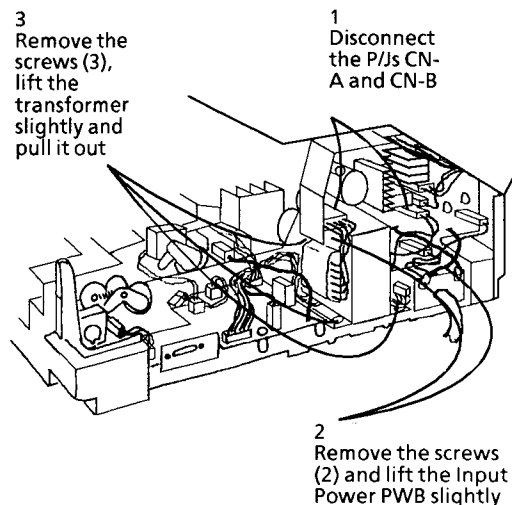


Figure 1. Removing the Main Transformer

Replacement

1. Install the Transformer while ensuring that the wires that are below the Transformer remain in the frame channel that is under the Transformer.

REP 1.5 Main PWB

Parts List on PL 1.2

Removal

1. Enter the diagnostic mode. If the diagnostic mode cannot be entered, go to step 3.
2. Enter the codes shown in Tables 1 and 2, record the data in the data columns, then go to step 3.

NOTE: Table 1 and Table 2 are shown on the following pages.

NOTE: A procedure is in Section 6 Customer Programming or Customizing Your Copier is in the 5614 5113/5114 User Guide.

3. Disconnect the copier power cord.
4. Remove the Upper Rear Cover (REP 14.3).

CAUTION

Certain components in the 5614 5113/14 Copier are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

5. Remove the Main PWB (Figure 1).

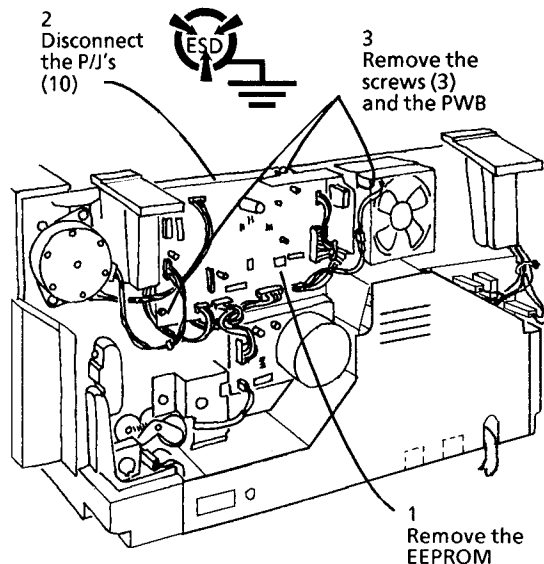


Figure 1. Removing the Main PWB

Replacement

CAUTION

Certain components in the 5614 5113/14 Copier are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

NOTE: If entry to this procedure is from the U6 RAP and the U6 RAP requires the Main PWB to be replaced, perform step 1 and step 8. Do not change EEPROMS.

1. Install the new Main PWB.
2. If the diagnostic mode was entered NVM values were recorded in step 1 of the removal, go to step 3. Otherwise, go to step 8.
3. Remove the EEPROM from the new Main PWB. Remove the old EEPROM from the Main PWB that was removed in step 5 of the removal and install it in the new Main PWB.
4. Check and/or load the data that was recorded during the removal procedure (Table 1 and Table 2).
5. Make copies of the test pattern and perform any copy quality adjustments required. The Main PWB replacement procedure is complete if copy quality is good. Do not continue to step 8.

6. Perform the following diagnostic routines, checks, or adjustments.

- a. Enter [20-1] and press the Start button. The copier will run for 3 to 5 minutes to set up the Dry Ink Concentration ratio.
- b. Check that the data in the NVM locations is correct for the copier configuration (Configuration Codes chart in Section 6).
- c. Check the Lens NVM (ADJ 6.17).
- d. Check the Magnification (ADJ 6.2).
- e. Check the Registration Buckle (ADJ 8.1).
Check the Lead Edge Registration:
With 1:1: (ADJ 8.2)
With R/E: (ADJ 8.5)
- f. Check the Lead/Trail Edge Deletion (ADJ 8.3).
- g. Adjust the Exposure Level (ADJ 6.1).
- h. **SDF Only:** Check the SDF Exposure (ADJ 5.3).
- i. Check the CRU reorder signal [20 – 14] (Table 1).
- j. Check the foreign interface enable [50 – 1] (Table 1).
- k. Make copies of the test pattern and perform any copy quality adjustments required. If image density is not in specification, replace the Developer Material (REP 9.8).

Table 1

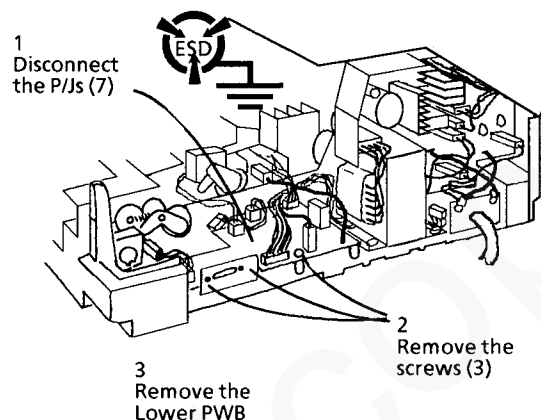
Code	Function	Range	Default	Data	ADJ	Description
20-2	Fuser Temperature	75 to 00	90		10.1	The last two digits of the presently set temperature
20-3	Lens Identification	00 to 21	—		6.17	Lens tag # for lens characteristics
20-4	Exposure Level Text Lighter/Darker Photo Lighter/Darker Auto	00 to 99 00 to 99 00 to 99	— — — — —		6.1 6.1 6.1	This adjustment sets up the Auto, Normal, and Photo modes
20-5	Auto Exposure Sensor	Hex	—	N/A	—	Auto Exposure Sensor setup
20-6	Magnification (Front-to-Rear)	00 to 99	50		6.2	Lens position
20-7	Magnification (Lead Edge to Trail Edge)	00 to 99	50		6.2	Scan rate
20-8	SDF Magnification	00 to 99	50		5.2	SDF transport rate
20-9	Lead Edge Registration 1:1 only w/R/E w/R/E/SDF	00 to 99 00 to 99 00 to 99	50 50 50		8.2 8.5 8.5	Lead Edge Registration-Registration Clutch timing
20-10	Registration Buckle Tray 1/2 Bypass	00 to 99 00 to 99	25 50		8.1 8.1	Feed / Transport Clutch off timing
20-11	Lead/Trail Edge Deletion Lead Edge Trail Edge	00 to 99 00 to 99	50 50		8.3 8.3	The timing of the energizing of the charge corotron grid is adjusted.
20-12	Metric or Inch Size paper 1:1 R/E Fixed Zoom	01 or 03 53 11 or 13	— — —		— — —	01 = metric, 03 = inch 53 = Retail only 11 = metric, 13 = inch
20-14	RX and XCL only: CRU Re-order Signal	0 or 1	0		—	0 = Off / 1 = On
20-15	SDF Exposure	00 to 99	—		5.3	SDF / Document Glass exposure correction
20-16	Tray 1 Size 250 w/w/oSDF 500 w/w/o SDF	00 to 03	—		—	00 = 250 w/o SDF / 01 = 250 w/SDF 02 = 500 w/o SDF / 03 = 500 w/SDF
20-17	Xerographic Auto Correct	06, 16	16		—	Automatic density compensation value
50-01	Foreign Interface enable	0 or 1	0		—	0 = Off / 1 = On

Table 2

Code	Feature	Default/ Data	Option Number Description
0	Priority Tray	1	1 - Tray 1 2 - Tray 2 3 - Bypass Tray
1	Timeout to Auto Clear	4	1 - 30 seconds 2 - 60 seconds 3 - 90 seconds 4 - 120 seconds
2	Timeout to Power Saver	0	0 - Off 1 - On 4 minutes 2 - On 30 min. 3 - On 90 min. 4 - On 120 min.
3	Power Saver Recovery Time	1	1 - 10 seconds 2 - 30 seconds
4	Default Magnification (R/E only)	1	1 - 100% 2 - 99% 3 - 101%
5	Default Exposure	2	2 - Normal 1 - Auto
6	Reduction / Enlargement Preset (R/E only)	0	0 - 129% 1 - 94% (A4 to 11) 2 - 84% (13 to 11) 3 - 89% (13 to A4)

REP 1.6 Lower PWB**Parts List on PL 1.3****Removal**

1. Disconnect the copier power cord.
2. Remove the Lower Rear Cover (REP14.4).
3. Remove the Lower PWB (Figure 1).

**Figure 1. Removing the Lower PWB****REP 1.7 Control Panel PWB****Parts List on PL 1.1****Removal****CAUTION**

Certain components in the 5614 5113/14 Copier are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Disconnect the copier power cord.
2. Remove the Control Panel (REP14.1).
3. Remove the screws and remove the Control Panel PWB from the Control Panel.

REP 1.8 Fuses

Parts List on PL 1.3, 8.1

Replacement

NOTE: Use the table below to identify the voltage and current specifications for the fuse that is to be replaced (Figure 1).

Product Code	F301 SDF PWB	F501 Input Power PWB	F502 Input Power PWB	F503 Input Power PWB	F504 Input Power PWB	F505 Input Power PWB
OKU		15A / 250V		3.15A / 125V	5A / 125V	1A / 250V
3KU		15A / 250V		3.15A / 125V	5A / 125V	1A / 250V
6KU		10A / 250V	10A / 250V	3.15A / 250V	5A / 250V	1A / 250V
1KU		15A / 250V		3.15A / 125V	5A / 125V	1A / 250V
4KU		15A / 250V		3.15A / 125V	5A / 125V	1A / 250V
7KU		10A / 250V	10A / 250V	3.15A / 250V	5A / 250V	1A / 250V
2KU	2A / 125V	15A / 250V		3.15A / 125V	5A / 125V	1A / 250V
5KU	2A / 125V	15A / 250V		3.15A / 125V	5A / 125V	1A / 250V
8KU	1.25A / 250V	10A / 250V	10A / 250V	3.15A / 250V	5A / 250V	1A / 250V
2KV		15A / 250V		3.15A / 125V	5A / 125V	1A / 250V
4KV		10A / 250V	10A / 250V	3.15A / 250V	5A / 250V	1A / 250V
3KV	2A / 125V	15A / 250V		3.15A / 125V	5A / 125V	1A / 250V
5KV	1.25A / 125V	10A / 250V	10A / 250V	3.15A / 250V	5A / 250V	1A / 250V

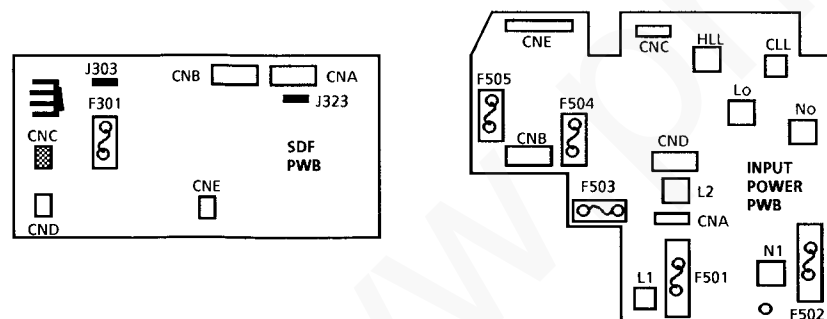


Figure 1. Fuse Specifications and Locations

REP 4.1 Main Drive Motor (MOT1)

Parts List on PL 2.3

Removal

1. Disconnect the copier power cord.
2. Remove the Upper Rear Cover (REP14.3).
3. Remove the Main Drive Motor (Figure 1).

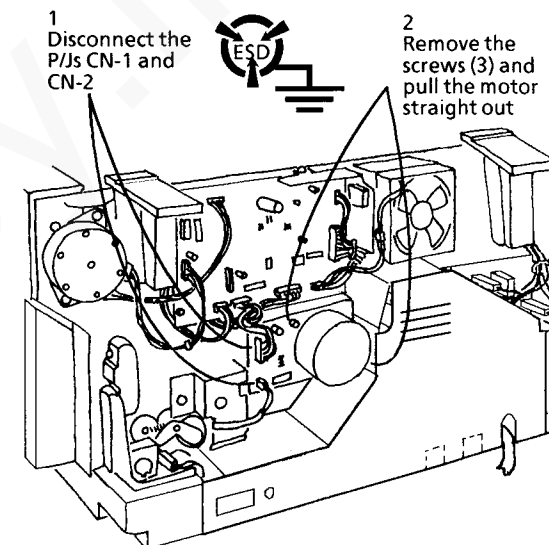


Figure 1. Removing the Main Drive Motor

REP 5.1 SDF Assembly

Parts List on PL 8.1

Removal

1. Disconnect the copier power cord.
2. Remove the Upper Rear Cover (REP 14.3).
3. Prepare to remove the SDF Assembly (Figure 1).

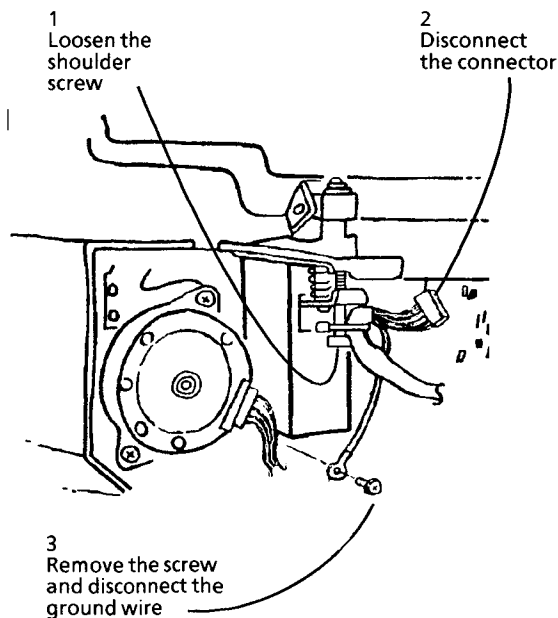


Figure 1. Preparing to Remove the SDF Assembly

4. Remove the SDF Assembly (Figure 2).

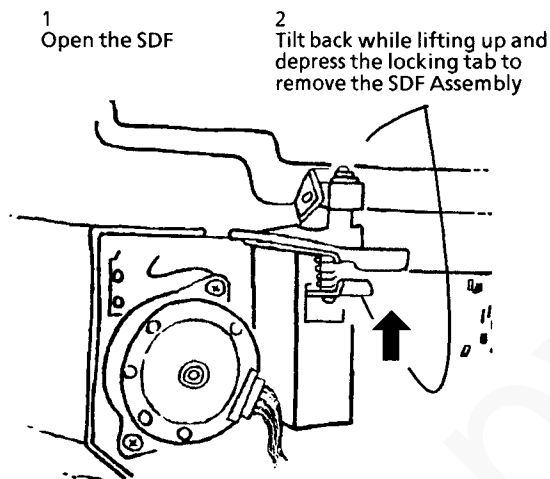


Figure 2. Removing the SDF Assembly

REP 5.2 SDF Drives Cover

Parts List on PL 8.1

Removal

1. Disconnect the copier power cord.
2. Remove the SDF Drives Cover (Figure 1).

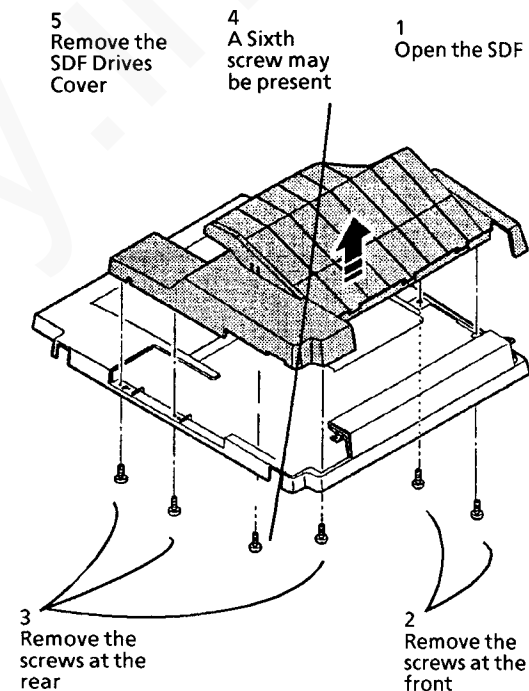


Figure 1. Removing the SDF Drives Cover

REP 5.3 Exit Cover

Parts List on PL 8.2

Removal

1. Disconnect the copier power cord.
2. Remove the SDF Drives Cover (REP 5.2).
3. Remove the Exit Cover (Figure 1).

Remove the screws (4) and the exit cover

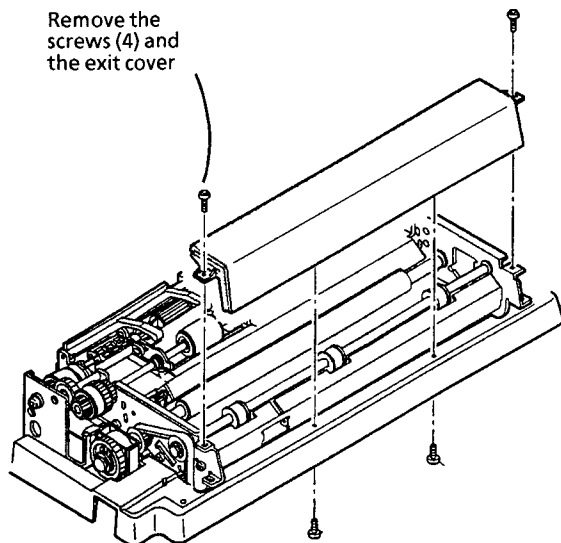


Figure 1. Removing the Exit Cover

REP 5.4 SDF Drive Motor (MOT2)

Parts List on PL 8.3

Removal

1. Disconnect the copier power cord.
2. Remove the SDF Drives Cover (REP 5.2).
3. Remove the SDF Drive Motor (Figure 1).

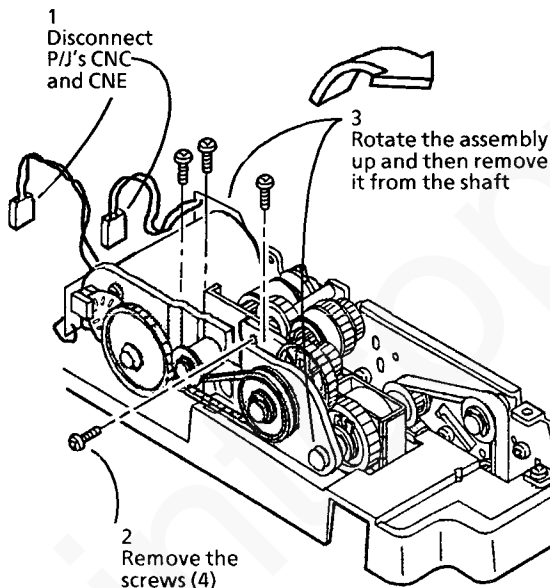


Figure 1. Removing the SDF Drive Motor

REP 5.5 Transport Assembly

Parts List on PL 8.2, 8.3, 8.4

Removal

1. Disconnect the copier power cord.
2. Remove the SDF Drives Cover (REP 5.2).
3. Remove the SDF Drive Motor (REP 5.4).
4. Remove the Transport Assembly (Figure 1).

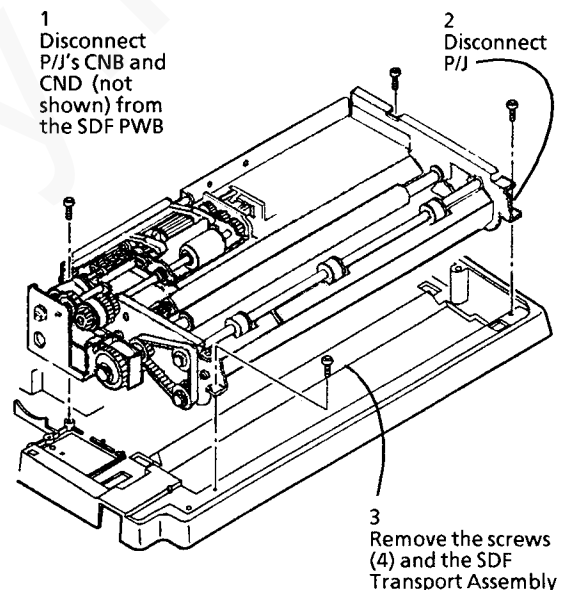


Figure 1. Removing the Transport Assembly

REP 5.6 Retard Roller

Parts List on PL 8.2

Removal

1. Disconnect the copier power cord.
2. Remove the SDF Drives Cover (REP 5.2).
3. Remove the Transport Assembly (REP 5.5).
4. Remove the Retard Roller from the bottom of the Transport Assembly.

REP 5.7 SDF Nudger Clutch

Parts List on PL 8.3

Removal

1. Disconnect the copier power cord.
2. Remove the SDF Drives Cover (REP 5.2).
3. Remove the SDF Drive Motor (REP 5.4).
4. Remove the Transport Assembly (REP 5.5).
5. Remove the SDF Nudger Clutch (Figure 1).

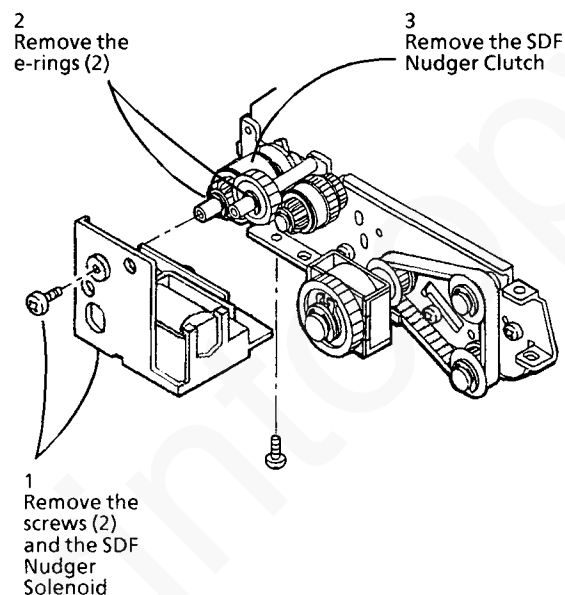


Figure 1. Removing the SDF Nudger Clutch

Replacement

1. Ensure that the clutch is assembled so that each end of the wrap spring is in the center position of the adjustment hole or slot.

REP 5.8 SDF Registration Clutch (CL1)

Parts List on PL 8.4

Removal

1. Disconnect the copier power cord.
2. Remove the SDF Drives Cover (REP 5.2).
3. Remove the SDF Drive Motor (REP 5.4).
4. Remove the Transport Assembly (REP 5.5).
5. Remove the SDF Registration Clutch (Figure 1).
 - a. Remove the clips (2).
 - b. Disconnect the P/J.
 - c. Remove the washer with the gear, hub, and wrap spring.
 - d. Make a mark on the shaft for the location of the clutch bearing.
 - e. With a 1.5 mm hex wrench, loosen the hex screw and remove the SDF Registration Clutch.

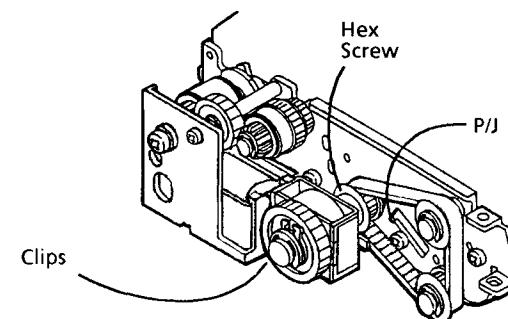


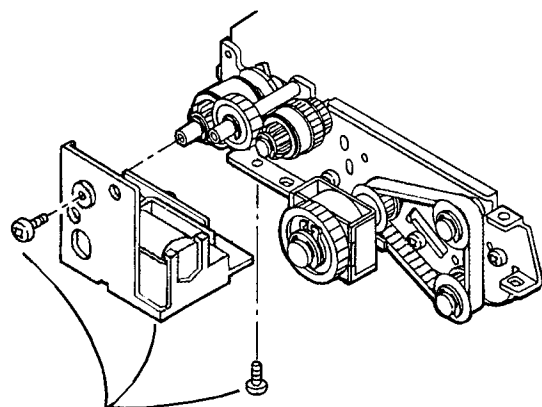
Figure 1. Removing the SDF Registration Clutch

REP 5.9 SDF Nudger Solenoid (SOL1)

Parts List on PL 8.3

Removal

1. Disconnect the copier power cord.
2. Remove the SDF Drives Cover (REP 5.2).
3. Remove the SDF Drive Motor (REP 5.4).
4. Remove the Transport Assembly (REP 5.5).
5. Remove the SDF Nudger Solenoid (Figure 1).



Remove the screws (2) and the SDF Nudger Solenoid

Figure 1. Removing the SDF Nudger Solenoid

REP 5.10 SDF Registration Guide

Parts List on PL 7.2

Replacement

1. Install the SDF Registration Guide (Figure 1).
 - a. Position the SDF Document Glass as shown.
 - b. Install the SDF Registration Guide so that the Tab that is under the guide engages the slot in the frame.
 - c. Install the Shoulder Screws (2).
 - d. Install the remaining Screws (3).

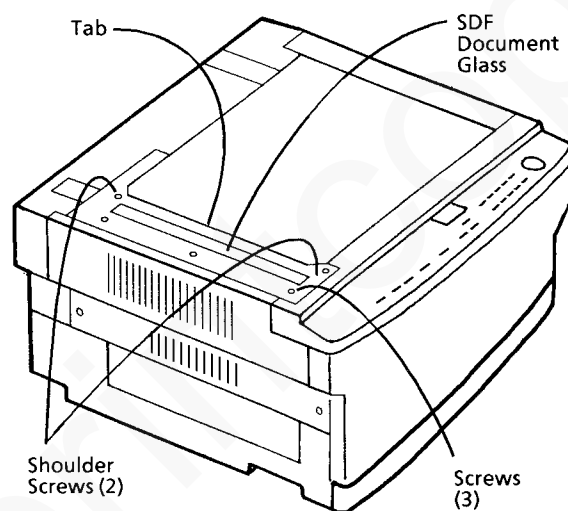


Figure 1. Installing the SDF Registration Guide

REP 5.11 SDF Document Glass

Parts List on PL 7.2

Replacement

1. Install the SDF Document Glass so that the white stripe faces down and is toward the front.
2. Install the SDF Registration Guide (REP 5.10).

REP 5.12 SDF Registration Roll

Parts List on PL 8.3, PL8.4

Removal

1. Switch off the copier.
2. Remove the SDF Drives Cover (REP 5.2).
3. Remove the SDF Exit Cover (REP 5.3).
4. Remove the Transport Assembly (REP 5.5).
5. Turn over the Transport Assembly so that the bottom is facing up.

NOTE: In the next two steps, the front and rear Springs are different. Mark the Springs so that during assembly, the front Spring and rear Spring are installed in the correct positions.

6. Remove the front Spring from the SDF Registration Pinch Roll and make a note of the front position of this spring (PL 8.4).
7. Remove the SDF Registration Pinch Roll.
8. Remove the rear Spring from the Registration Pinch Roll and make a note of the position (PL 8.4).
9. Disconnect the SDF Registration Clutch (REP 5.8).
10. Remove the Transport Belt (PL 8.4).
11. Remove the bearing from the end of the SDF Registration Roll that is opposite the Registration Clutch (PL 8.4).
12. Move the SDF Registration Roll toward the rear and lift the front of the shaft and then remove the washers (4) with the spring.
13. Move the SDF Registration Roll toward the front and remove the shaft.

Replacement

1. If the SDF Registration Roll is being replaced, remove the remaining parts from the roll and install them on the end of the new roll with the SDF Registration Clutch (Figure 1).

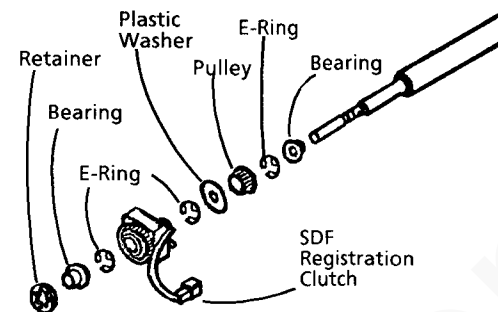


Figure 1. Installing the Components on the SDF Registration Roll

2. Install the end of the SDF Registration Roll assembly that has the clutch into the Transport Assembly. Ensure that the arms of the Exit Sensor Actuator are both above and below the roll.

3. Install the washers (4) with the spring that were removed in step 12 (Figure 2).

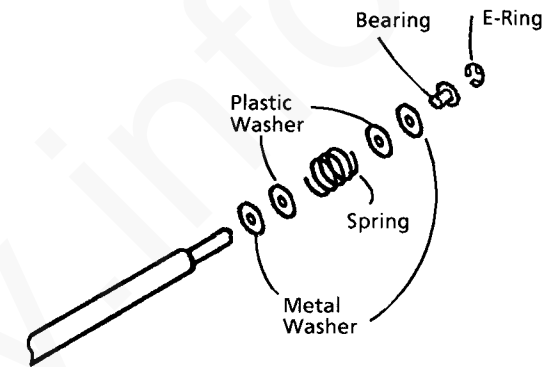


Figure 2. Installing the Components on the SDF Registration Roll

4. Install the other end of the SDF Registration Roll assembly into the Transport Assembly.
5. Install the bearing and e-ring.
6. Install the SDF Registration Pinch Roll with bearings and springs. Ensure the front and rear springs are installed in the front and rear positions. Ensure the spring pushes on the washer and the washer pushes on the shoulder of the bearing.
7. Install the Transport Belt.
8. Install the Transport Assembly (REP 5.5). Ensure the P/J's (2) are connected.
9. Install the SDF Exit Cover (REP 5.3). Ensure the P/J (1) is connected.
10. Install the SDF Drives Cover (REP 5.2).

REP 6.1 Document Glass

Parts List on PL 7.2

Removal

WARNING

Electrical shock hazard is present if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Bypass Tray (REP 7.2).
3. Remove the Document Glass (Figure 1).
 - a. Remove the screws (2).
 - b. Pull the bottom of the Right Cover out slightly to disengage the tabs (not shown) and remove the cover.
 - c. Move the Document Glass to the right slightly to disengage the Registration Guide and then remove the Document Glass.

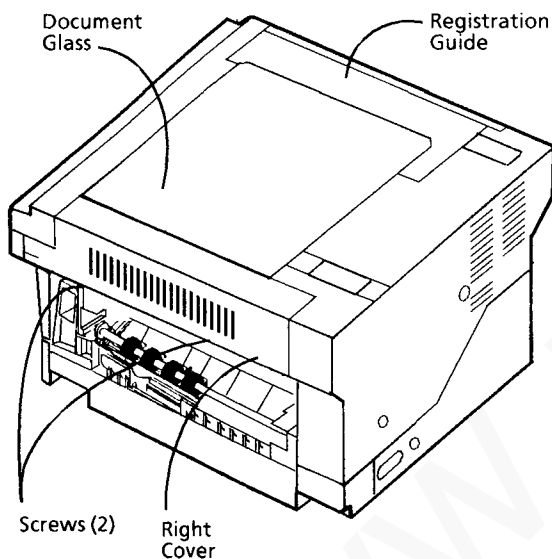


Figure 1. Removing the Document Glass

Replacement

NOTE: While replacing the Document Glass, ensure that the rubber pads are under the edges of the Document Glass. Ensure that the edge of the Document Glass is adjacent to the bracket (not shown) (Figure 1).

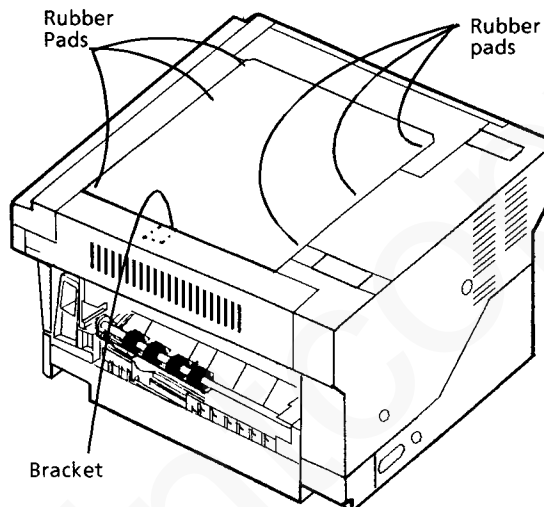


Figure 1. Checking the Rubber Pads

REP 6.2 Scan Drive Motor (MOT5)

Parts List on PL 3.1B

Removal

1. Disconnect the copier power cord.
2. Remove the Upper Rear Cover (REP 14.3).
3. Remove the Scan Drive Motor (Figure 1).

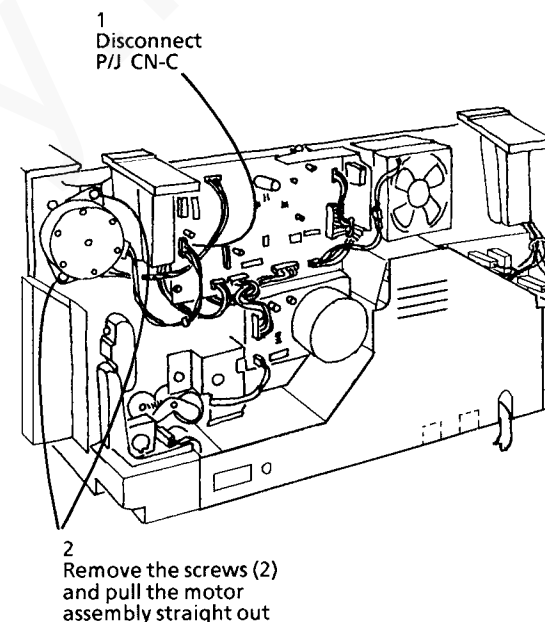


Figure 1. Removing the Scan Drive Motor

REP 6.3 Exposure Lamp

Parts List on PL 3.3

Removal

WARNING

Electrical shock hazard is present if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Document Glass (REP 6.1).
3. Remove the Exposure Lamp (Figure 1).

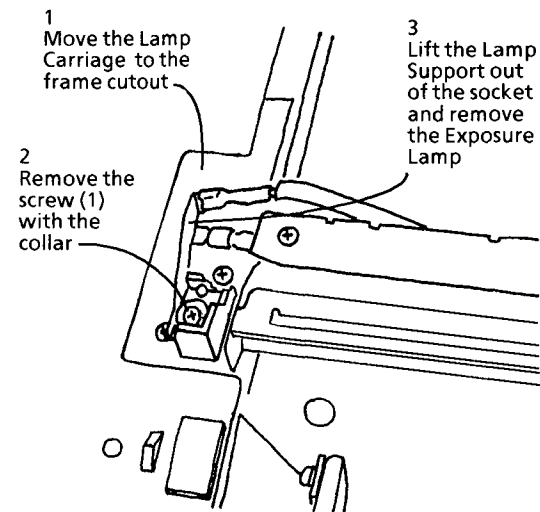


Figure 1. Removing the Exposure Lamp

Replacement

CAUTION

Handle the Exposure Lamp by the insulators on the ends. If you touch the lamp, clean the lamp with film remover.

1. Install the Exposure Lamp (Figure 1).

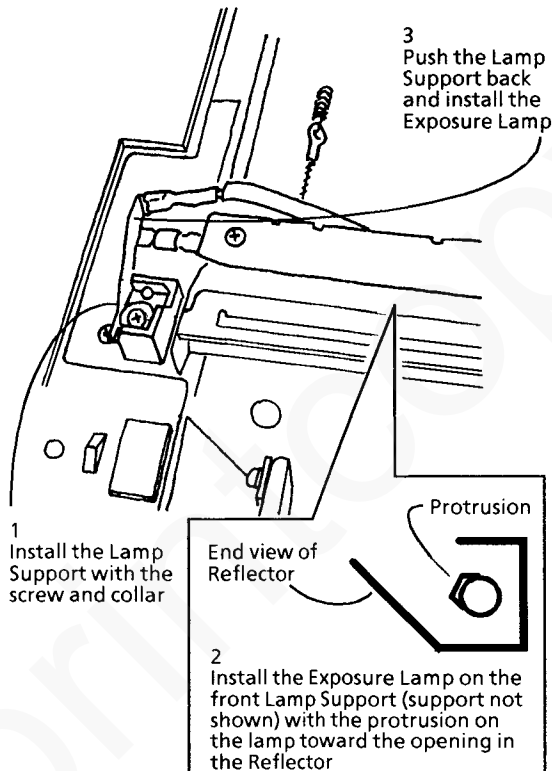


Figure 1. Installing the Exposure Lamp

REP 6.4 Lens Drive Motor (MOT4)

Parts List on PL 3.2A

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Bypass Tray (REP 7.2).
3. Remove the Document Glass (REP 6.1).
4. Remove the Lens Cover (REP 6.10).
5. Remove the Lens Drive Motor screws (Figure 1)

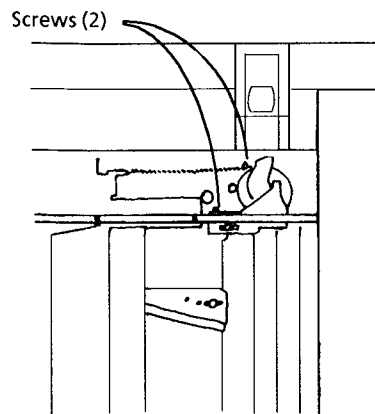


Figure 1. Removing the Screws

6. Remove the Upper Rear Cover (REP 14.3).
7. Prepare to remove the Lens Drive Motor (Figure 2).

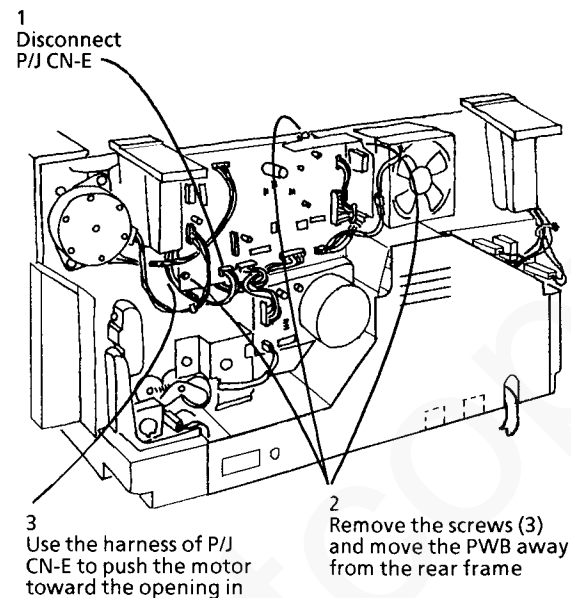


Figure 2. Preparing to Remove the Lens Drive Motor

8. Move the 4/5 Mirror Carriage to the right and remove the Lens Drive Motor through the opening (Figure 1)

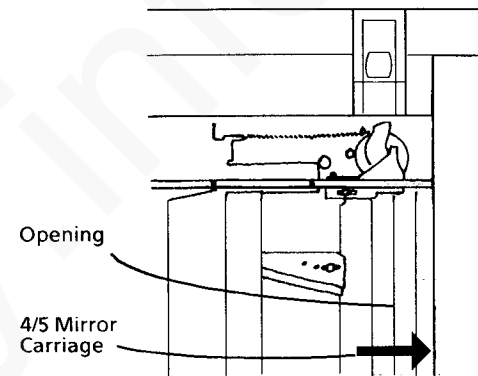


Figure 3. Removing the Lens Drive Motor

REP 6.5 Scan Cables

Parts List on PL 3.1A

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.

NOTE: This procedure is written so that one or both cables can be replaced, starting with either the front or the rear cable.

2. Remove the Control Panel (REP 14.1).
3. Remove the Left Cover (REP 14.2).
4. Remove the Bypass Tray Assembly (REP 7.2).
5. Remove the Document Glass (REP 6.1).
6. Remove the Lens Cover (REP 6.10).
7. Disengage the broken Scan Cable from the Lamp Carriage (rear end of Lamp Carriage shown in the figure, the front end is the same) (Figure 1).

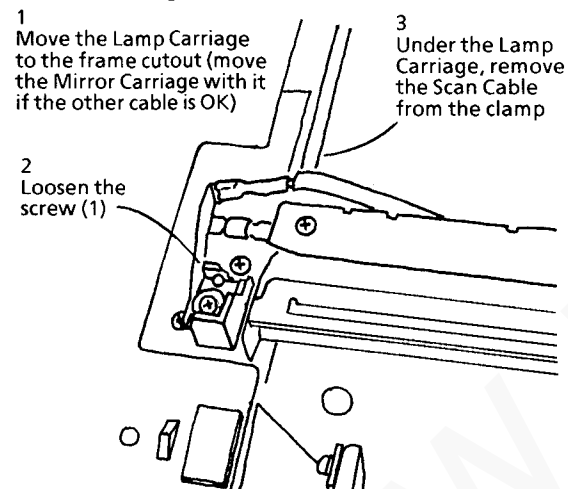


Figure 1. Disengaging the Rear Scan Cable from the Lamp Carriage

8. Remove the Scan Cable from the pulleys.

Replacement

1. Move the Lamp Carriage to a position over the Lens while moving the Mirror Carriage to the middle of the space between the Lamp Carriage and the left end of the copier. If one cable is on the pulleys, keep the carriages parallel while moving them.
2. Make a mark on the new Scan Cable. Mark both cables if both cables will be replaced. (Figure 2).

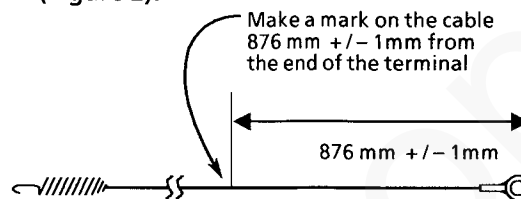


Figure 2. Making a Mark on the Scan Cable

3. Go to step 7 if replacing the rear cable or go to step 4 if replacing the front cable.
4. Install the cable on the Front Drive Pulley (Figure 3).

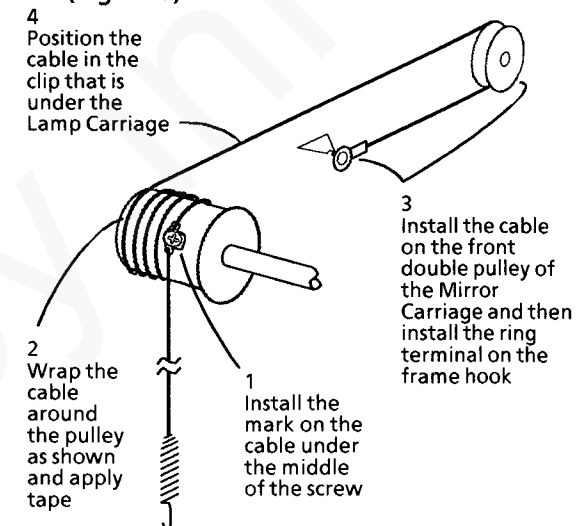


Figure 3. Installing the Front Scan Cable on the Front Drive Pulley

5. Install the remaining portion of the front Scan Cable (Figure 4)

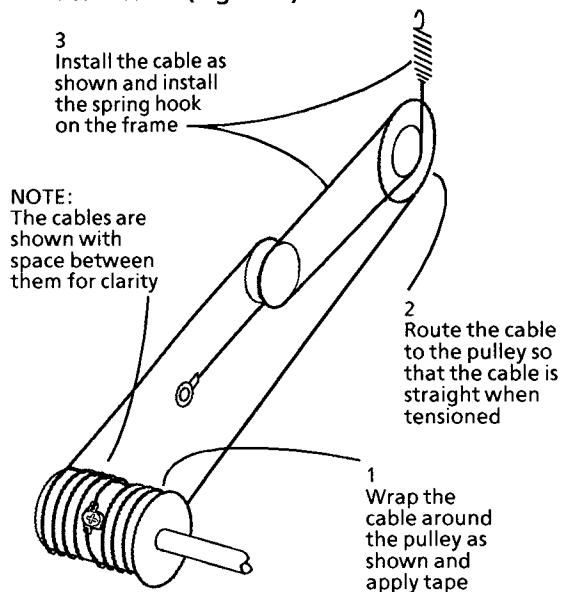


Figure 4. Installing the Front Scan Cable

6. If the rear Scan Cable is already replaced or is good, go to step 10, otherwise go to step 7.

7. Install the Scan Cable on the Rear Drive Pulley (Figure 5).

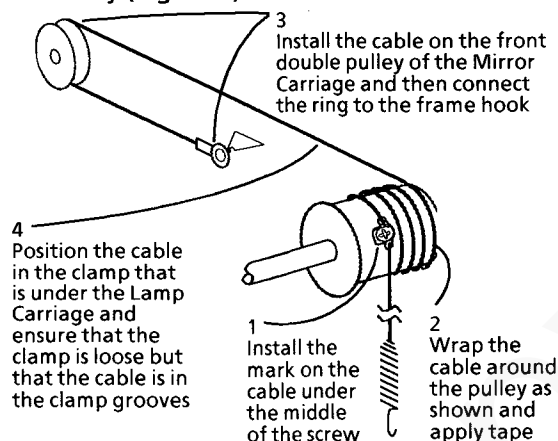


Figure 5. Installing the Rear Scan Cable on the Rear Drive Pulley

8. Install the remaining portion of the rear cable (Figure 6).

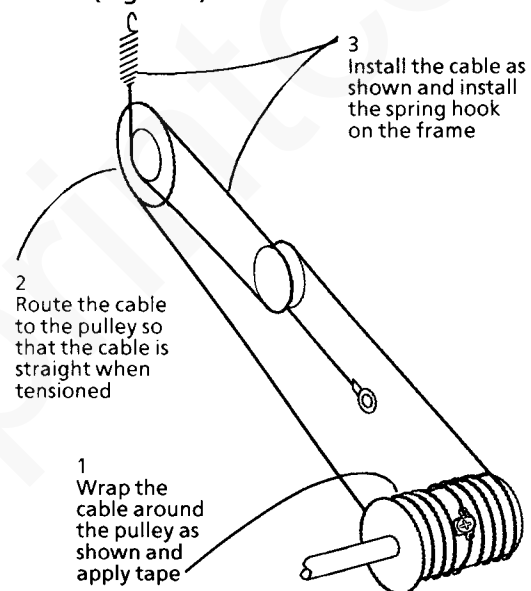


Figure 6. Installing the Rear Scan Cable

9. Go to step 7 of the Removal procedure to replace the front Scan Cable, otherwise go to step 10 to complete the procedure.
10. Remove the tape from the drive pulleys.
11. Position the cable in the clamp that is under the end of the Full Rate Carriage, at both ends of the carriage if both cables are replaced.
12. Move both the Full Rate and the Half Rate Carriages toward the right so that the Half Rate Carriage touches the frame tabs and the Full Rate Carriage touches the frame.
13. Adjust the Full Rate and Half Rate Carriage Parallelism (ADJ 6.7).

REP 6.6 Exposure Lamp Overtemperature Fuse (F1)

Parts List on PL 3.3

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Document Glass (REP 6.1).
3. Remove the Exposure Lamp Overtemperature Fuse (Figure 1).

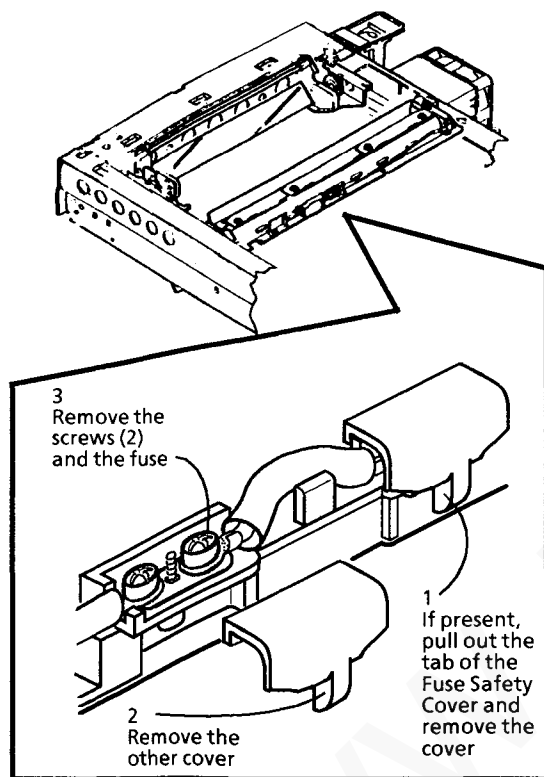


Figure 1. Removing the Exposure Lamp Overtemperature Fuse

REP 6.7 Optics Heater (HTR2)

Parts List on PL 3.2A

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Document Glass (REP 6.1).
3. Remove the Optics Heater (Figure 1).

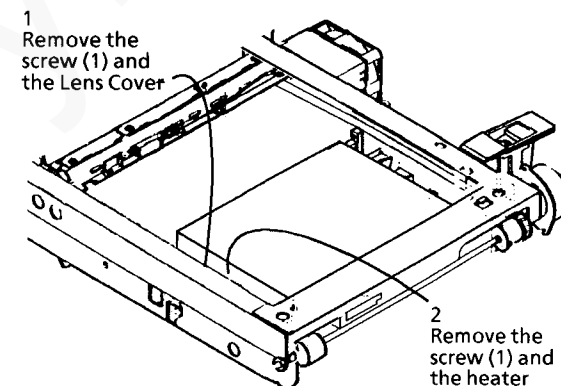


Figure 1. Removing the Optics Heater

REP 6.8 Lens Cable (R/E only)

Parts List on PL 3.2B

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Bypass Tray Assembly (REP 7.2).
3. Remove the Document Glass (REP 6.1).
4. Remove the Lens Cover (REP 6.10).
4. Remove the Lens Cable by disengaging the Spring and then the cable end.

Replacement

1. Install the Lens Cable (Figure 1).

NOTE: In step 4 of Figure 1, the 2mm Hex Wrench will fit loosely. Position the wrench as shown before going to the next step.

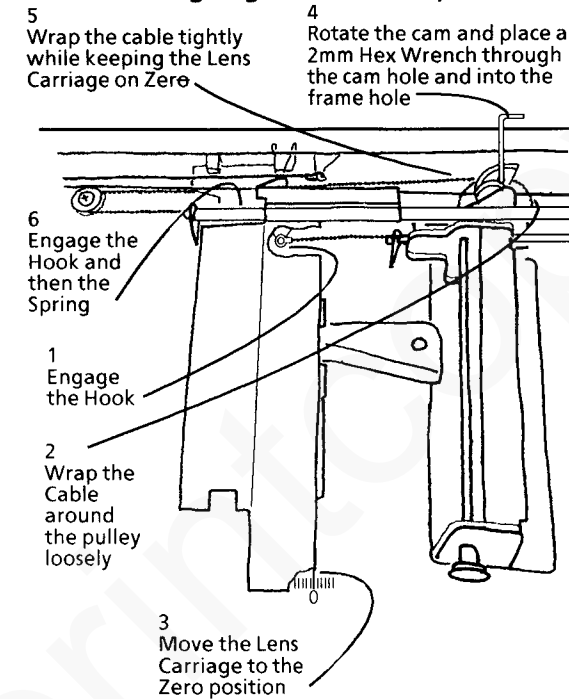


Figure 1. Installing the Lens Cable

2. Reassemble the copier.
3. Check the Resolution (R/E only) (ADJ 6.12).
4. Check the Magnification (ADJ 6.2).
5. Check the Baseline Front – to – Rear Registration (R/E only) (ADJ 6.11).

REP 6.9 Optics Cooling Fan SDF (MOT6)

Parts List on PL 3.1A

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Control Panel (REP 14.1).
3. Remove the Left Cover (REP 14.2).
4. Open the copier, then remove the Bypass Tray (REP 7.2).
5. Close the copier.
6. Remove the Upper Rear Cover (REP 14.3).
7. Remove the fan.
 - a. Disconnect the P/J.
 - b. Remove the upper and lower mounting screws and the fan.

Replacement

CAUTION

Copy Quality problems may occur if the upper mounting screw is longer than 10 mm.

REP 6.10 Lens Cover (1:1 or R/E)

Parts List on PL 3.1A

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Document Glass (REP 6.1).
3. Remove the Lens Cover (Figure 1).

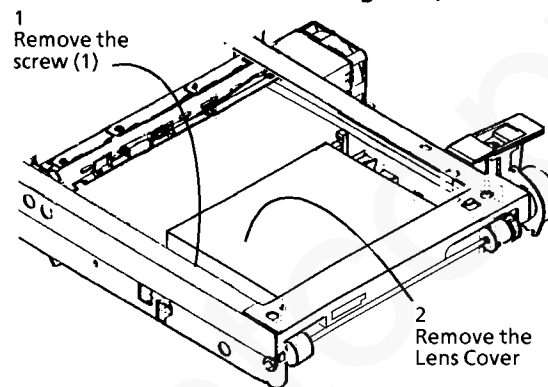


Figure 1. Removing the Lens Cover

REP 7.1 Tray 1 Feed Assembly / Transport

Parts List on PL 4.5

Removal

1. Disconnect the copier power cord.
2. Remove the Tray 1 Feed Assembly / Transport (Figure 1).

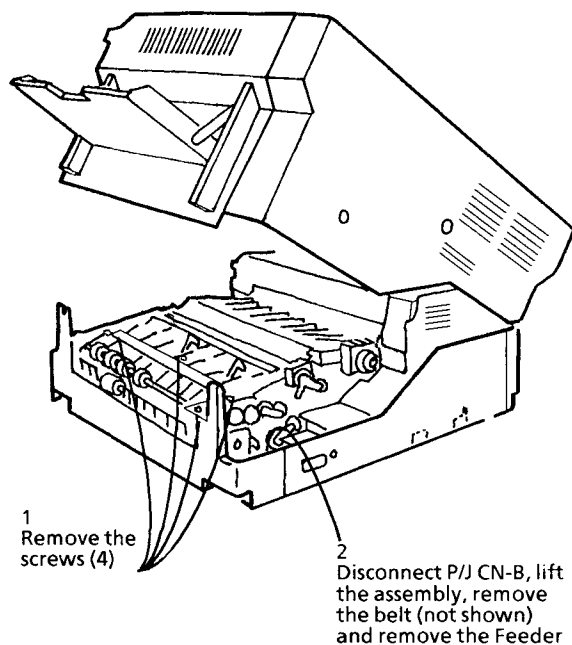


Figure 1. Removing the Tray 1 Feed Assembly / Transport

REP 7.2 Bypass Tray Assembly

Parts List on PL 4.9

Removal

1. Disconnect the copier power cord.
2. Remove the Bypass Tray Assembly (Figure 1).

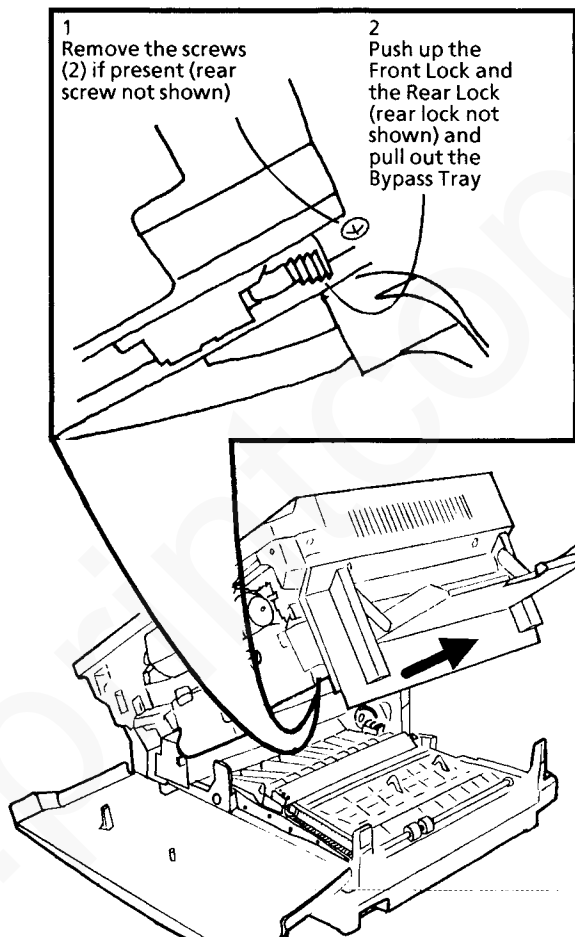


Figure 1. Removing the Bypass Tray

REP 7.3 Tray 2

Parts List on PL 4.4

Removal

WARNING

Removing the copier from Tray 2 requires 2 people.

1. Disconnect the copier power cord.
2. Remove Tray 2.
 - a. Pull out and remove Tray 1.
 - b. Remove the screws (2) at each corner of the Tray 1 opening.
 - c. Remove the screw from the right rear corner of the copier.
 - d. Disconnect the Tray 2 harness.
 - e. Lift the copier off Tray 2.
 - f. If the Tray 2 is secured to a stand, remove the screws (2) from under the top surface of the stand. The screws are located under the left front and right rear of the copier.

REP 7.4 Tray 2 Feeder

Parts List on PL 4.7

Removal

1. Disconnect the copier power cord.
2. Remove Tray 2 (REP 7.3).
3. Remove the Tray 2 Feeder (Figure 1).

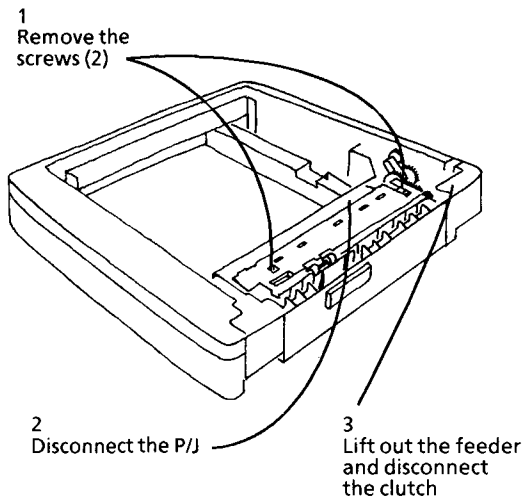


Figure 1. Removing the Tray 2 Feeder

REP 7.5 Tray 1 Lift Assembly

Parts List on PL 4.2

Removal

1. Disconnect the copier power cord.
2. Remove the Lower PWB (REP 1.6).
3. Remove the Tray 1 Lift Assembly (Figure 1).

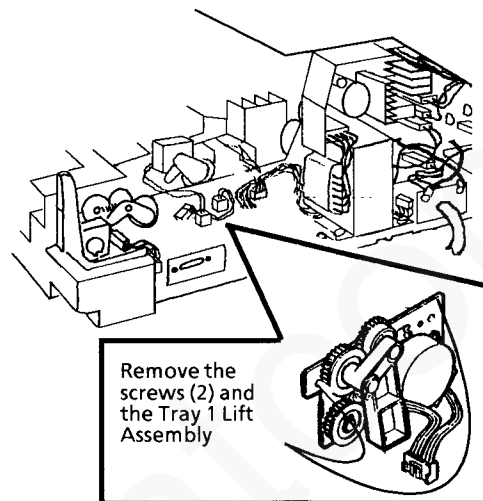


Figure 1. Removing the Tray 1 Lift Assembly

REP 7.6 Retract Spring

Parts List on PL 4.6, 4.7

Replacement

NOTE: Ensure that the ends of the spring are positioned as shown. The free end engages the cutout in the feeder Frame. The Retract Spring should be wound so that the Retract Arm will hold the Nudger Roll up and off of the paper stack (Figure 1).

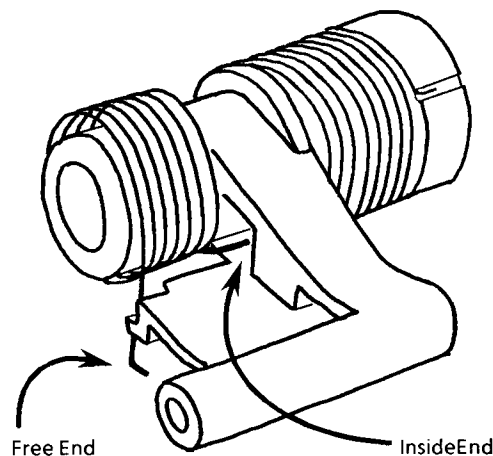


Figure 1. The Position of the Retract Spring

REP 7.7 Retard Roller

Parts List on PL 4.11

Replacement

NOTE: Ensure that the Retard Roller will rotate as shown (Figure 1).

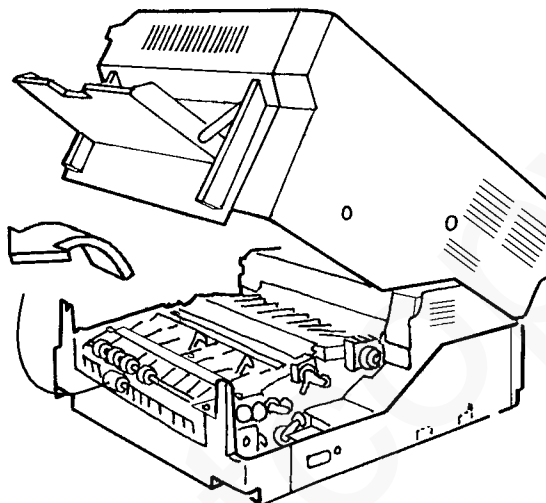


Figure 1. The rotation of the Retard Roller

REP 7.8 Feed Roller

Parts List on PL 4.9

Replacement

NOTE: Install the Feed Roller so that when the feed roller is rotated manually in the direction of the arrow, the drives remain stationary. (Figure 1)

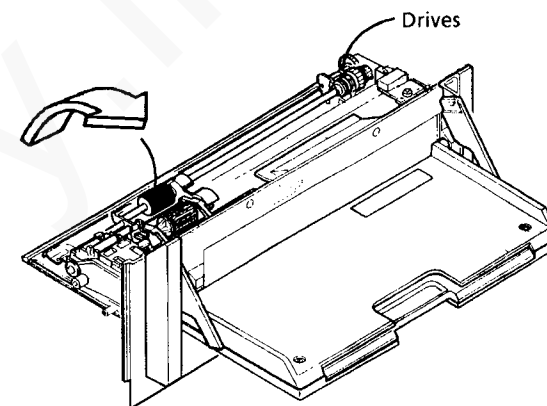


Figure 1. Checking the Feed Roll Rotation

REP 7.9 Actuator for Paper Size /Feed PWB

Parts List on PL 4.6

Removal

1. Disconnect the copier power cord.
2. Remove the Tray 1 Feed Assembly / Transport (REP 7.1).
3. Remove the screws (2) from the Paper Size/Feed PWB.
4. Remove the Actuator (Figure 1).

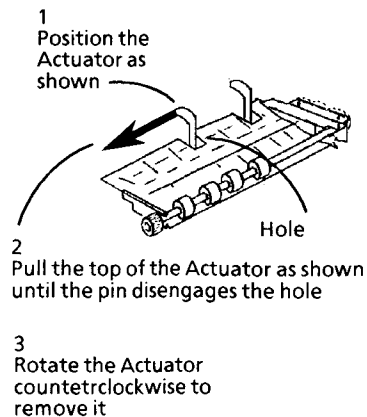


Figure 1. Removing the Actuator

Replacement

1. Install the Actuator (Figure 1).
 - a. Install the spring as shown with the Hook under the Flag.
 - b. Ensure the Free End of the spring is positioned under the transport while engaging the end of the pin with the spring in the hole
 - c. Rotate the Actuator clockwise, as viewed from the top of the Actuator, and engage the other pin on the Actuator.
 - d. The action of the Spring should cause the end of the Actuator with the Flag to move up when the transport is installed.

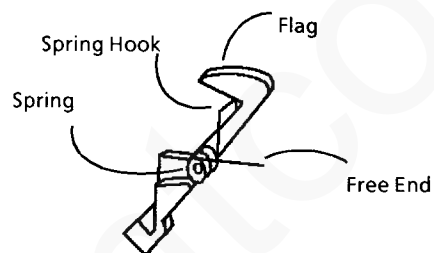


Figure 1. Installing the Actuator

REP 9.1 Transfer / Detack Corotron Assembly

Parts List on PL 5.6

Removal

1. Disconnect the copier power cord.
2. Remove the Transfer / Detack Corotron Assembly (Figure 1).

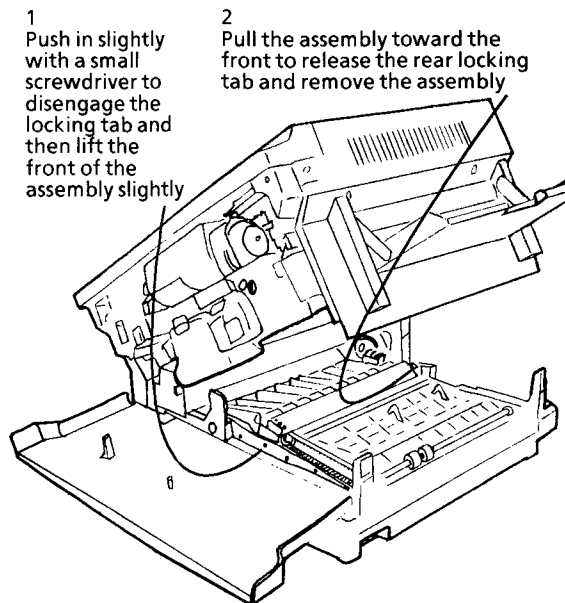


Figure 1. Removing the Transfer / Detack Corotron Assembly

REP 9.2 HVPS

Parts List on PL 1.3

Removal

1. Disconnect the copier power cord.
2. Remove the Transfer / Detack Corotron Assembly (REP 9.1).
3. Remove the Lower Rear Cover (REP 14.4).
4. Remove the HVPS (Figure 1).

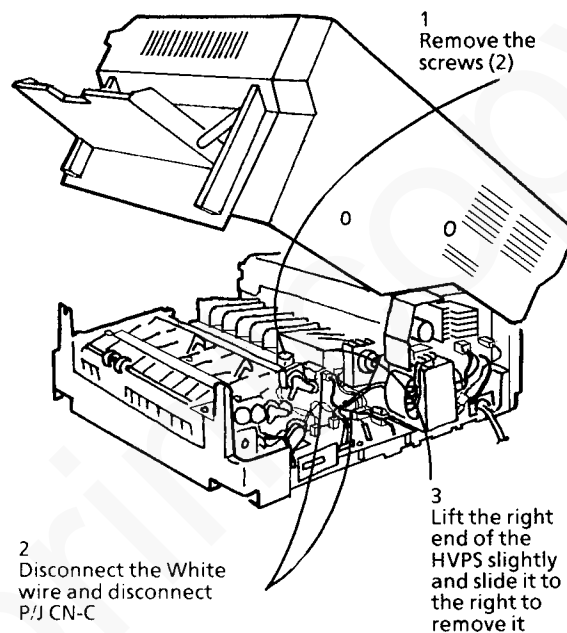


Figure 1. Removing the HVPS

REP 9.3 Developer Assembly

Parts List on PL 5.2A

Removal

1. Disconnect the copier power cord.
2. Remove the Dry Ink/Waste Bottle (Figure 1).

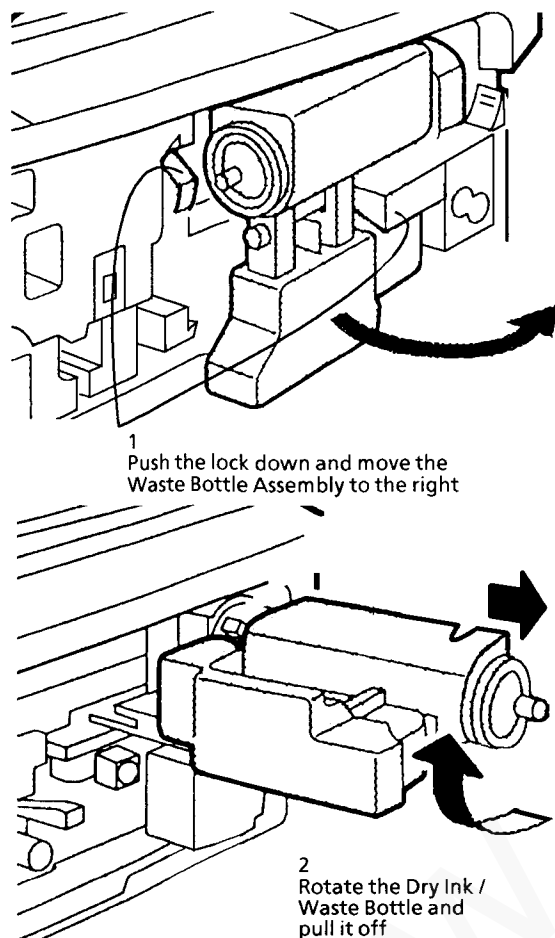


Figure 1. Removing the Dry Ink/Waste Bottle

3. Remove the Developer Assembly (Figure 2).

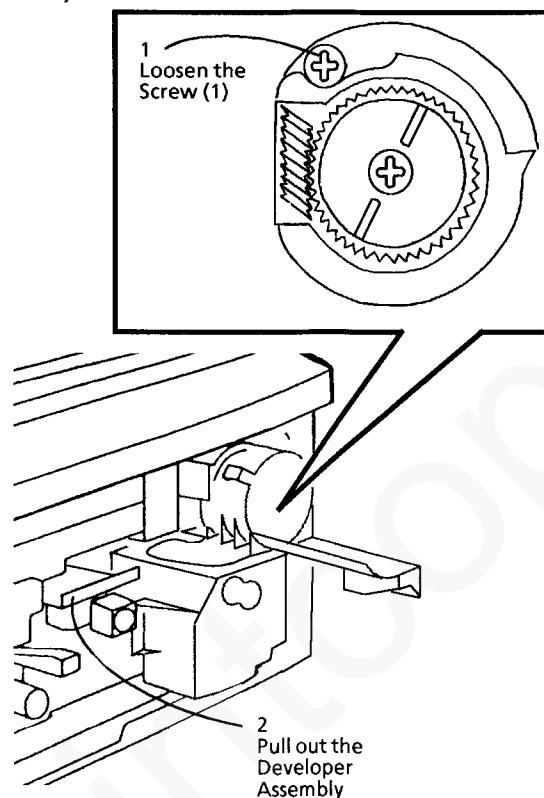


Figure 2. Removing the Developer Assembly

Replacement

1. If the Developer Assembly is replaced, install a new Developer Cartridge (PL 5.2A).

REP 9.4 Detack Corotron

Parts List on PL 5.6

Removal

1. Disconnect the copier power cord.
2. Remove the Transfer / Detack Corotron Assembly (REP 9.1).
3. Remove the Detack Corotron (Figure 1).

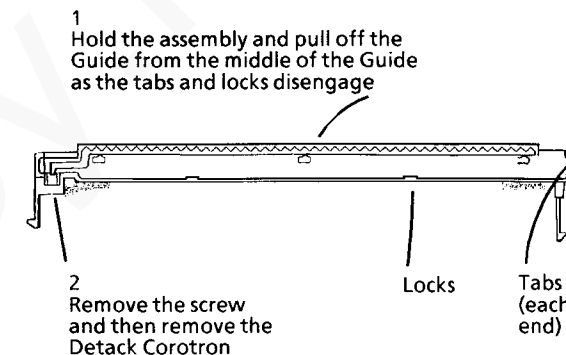


Figure 1. Removing the Detack Corotron

REP 9.5 Transfer Corotron

Parts List on PL 5.6

Removal

NOTE: Use this procedure only if the kit on PL 5.6 is not available.

1. Disconnect the copier power cord.
2. Remove the Transfer / Detack Corotron Assembly (REP 9.1).

Replacement

3. Remove the corotron wire (Figure 1).

NOTE: A ream of paper under the corotron assembly will support the assembly in an upright position.

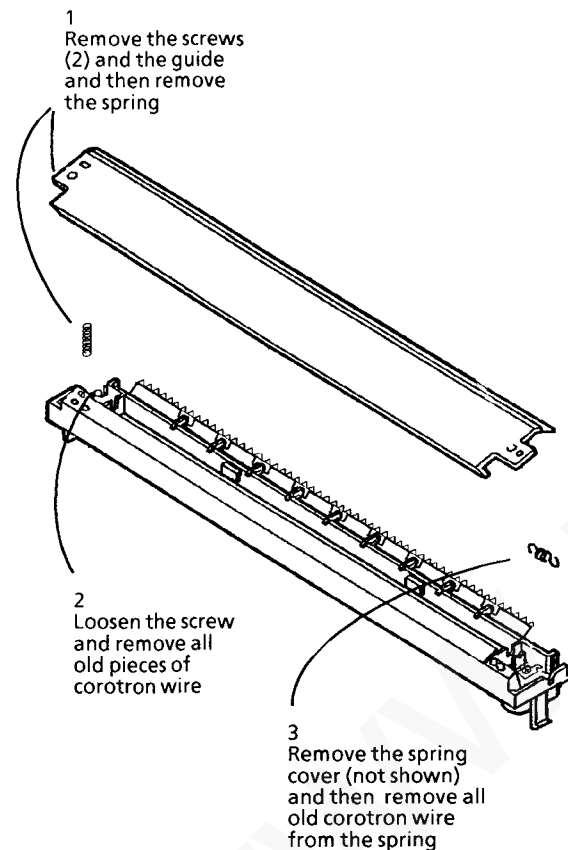


Figure 1. Removing the Corotron Wire

4. Install the corotron wire (Figure 2).

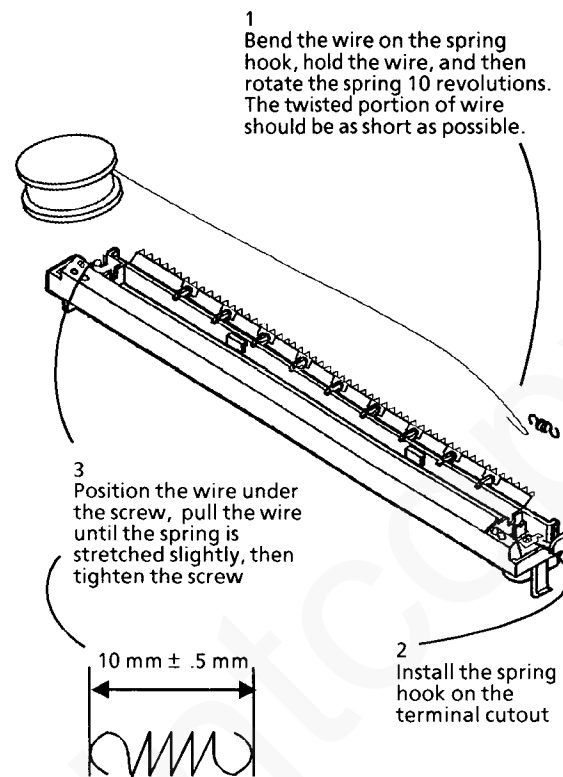


Figure 2. Installing the Corotron Wire

5. Complete the installation.

- a. Hold the corotron and then pull the corotron wire spool away from the corotron while moving the spool in a circular motion. The wire will break. Ensure that no wire extends above the screw.
- b. Clean the corotron wire with film remover.
- c. Reinstall the grounding spring that was removed in step 1 of Figure 1.
- d. Reinstall the wire spring cover.
- e. Reinstall the Guide with 2 screws.
- f. Reinstall the corotron assembly in the copier.

REP 9.6 Toner Hopper

Parts List on PL 5.4

Removal

1. Disconnect the copier power cord.
2. Remove the Developer Assembly (REP 9.3).
3. Remove the Dispenser Housing (Figure 1).

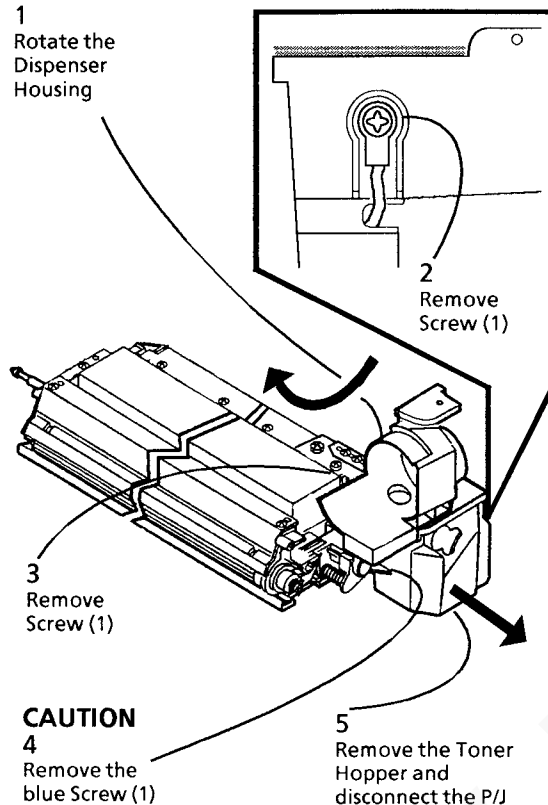


Figure 1. Removing the Toner Hopper

Replacement

1. Ensure that the 11T and 16T gears are installed as shown (Figure 1).

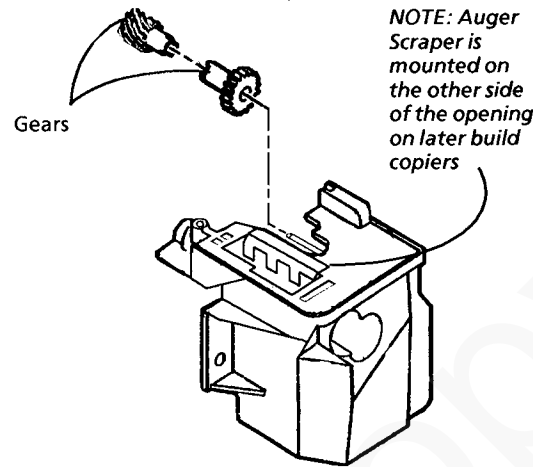


Figure 1. Installing the Gears

2. Install the Toner Hopper (Figure 2).
 - a. Connect the P/J for the Dry Ink Motor (not shown in the figure).
 - b. Position the edge of the Hopper in the Cutout of the Dispenser.
 - c. Ensure that the Dispenser Housing is rotated as shown while installing the Hopper and then engage the Slot of the Hopper with the Frame of the Dispenser Support.
 - d. The Hopper is installed when the Screw Hole and Frame Hole are aligned and when the Shaft is in the Frame Hole.
 - e. Install the Blue Screw as shown.
 - f. Install the remaining screws (2) and insure the gray ground wire is under one of the screws.

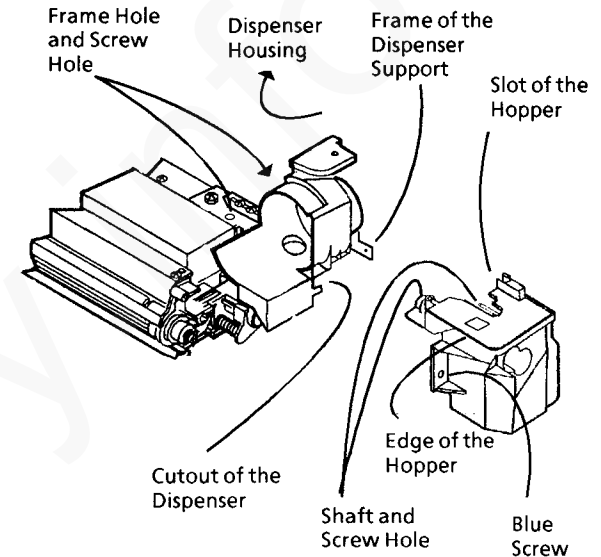


Figure 2. Installing the Toner Hopper

REP 9.7 Developer Material Inspection

Parts List on PL 5.2A

Removal

NOTE: This procedure is used to examine the developer material.

1. Disconnect the copier power cord.
2. Remove the Developer Assembly (REP 9.3).
3. Remove the Developer Cartridge by using the small screwdriver to release the locking tab while pulling the cartridge off of the Developer Assembly (Figure 1).

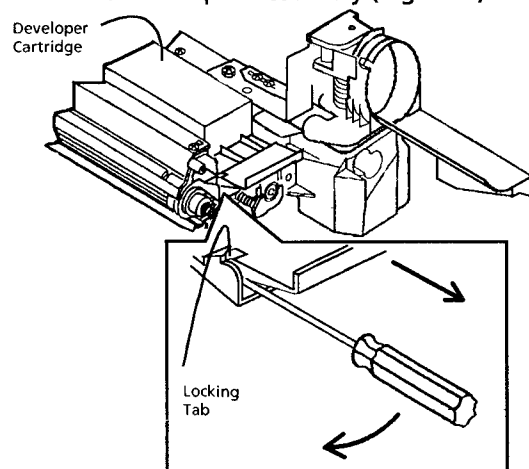


Figure 1. Removing the Developer Cartridge

4. Inspect the Developer Material. If the Developer Material covers most of the augers, is not caked into chunks, and is mostly carrier (feels like grit) and not Dry Ink (feels like powder), go to step 1 of Replacement.

If the Developer Material fails the description above, replace the Developer Material (REP 9.8).

Replacement

1. Reinstall the Developer Assembly (REP 9.3).
2. Reinstall the Developer Cartridge Cover.
3. Check the Copier Level (ADJ 1.1).

REP 9.8 Replacement Developer Material

Parts List on PL 5.2A

Removal

1. Switch off the copier and disconnect the copier power cord.
2. Remove the Developer Assembly (REP 9.3).
3. Disconnect the Toner Dispense Motor connector.
4. Remove the Developer Cover (Figure 1).
 - a. Place the Developer Assembly on a flat surface and remove the four (4) blue screws that secure the top panel to the developer assembly.
 - b. Lift the developer cover at the rear corner as show in Figure 1 and twist loose.
 - c. Set aside the top cover.

CAUTION

Do not allow the developer material to enter the developer drive gears on the end of the housing. This may cause damage to the drive components.

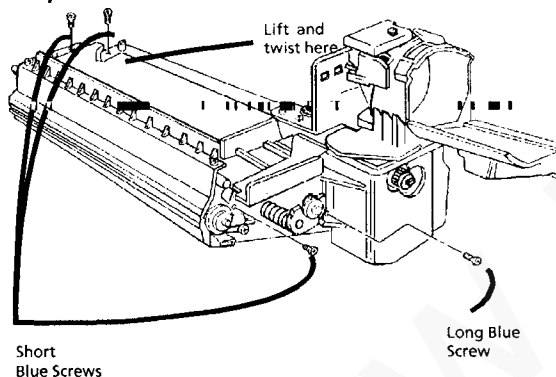


Figure 1. Removing the Developer Cover

5. Grasping the end of the housing with the drive gears, carefully empty the contents of the housing into the bag that is supplied with the kit and secure the bag with a twist tie. Dispose of the old developer according to local regulations.
6. Using a vacuum cleaner, remove the residue toner and developer from the mag roll and other developer housing areas, including the magnet on the developer cover.
7. Check the operation of the developer assembly drive system by performing the following:
 - a. Rotate the main developer assembly drive gear.
 - b. All the augers and the mag roll should rotate freely. Clean or replace as required (PL 5.3).

Replacement

1. Carefully pour the new developer from the container into the developer assembly. Distribute the developer equally over the augers.
2. Reinstall the top panel of the developer assembly.
 - **NOTE:** Ensure that the cover is properly latched and the toner dispenser drive motor wire are properly routed.
3. Reinstall and tighten the four (4) blue screws shown in Figure 1.
4. Check that the copier has Tag 2. If Tag 2 is not marked, perform the Developer Housing Guide Pin procedure in the General Service Notes in Section 6.

5. Reconnect the toner dispenser motor connector.

NOTE: Ensure that the motor connector is reinstalled in the toner hopper.

6. Reinstall the developer assembly and tighten the securing screw.

NOTE: Shake the toner cartridge before installation.

7. Install the toner cartridge. Move the dispenser housing into the normal operating position by pressing on the green bar.
8. Close the front cover and reconnect the power cord.
9. Check the copier Level (ADJ 1.1)
10. Enter [20 – 1] and press the Start button.

NOTE: The copier will run for 3 minutes. During this time a reference value is generated and stored in NVM.

11. Check the copy quality. Go to CQ 1 if there is a copy quality problem.
12. Check the customers toner supply. Explain to the customer the importance of shaking the cartridge and demonstrate it.

REP 10.1 Fuser Assembly

Parts List on PL6.1

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Fuser Assembly (Figure 1).

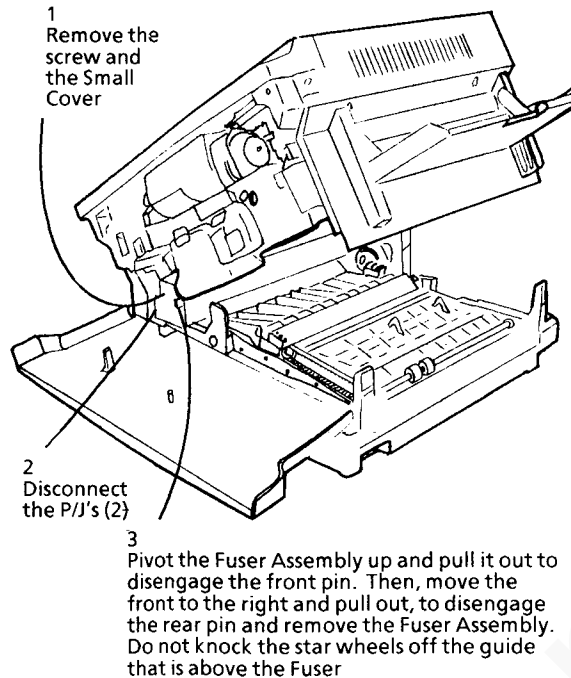


Figure 1. Removing the Fuser Assembly

Replacement

1. Do not knock the star wheels off the guide that is above the fuser when installing the Fuser Assembly.

REP 10.2 Fuser Heat Rod (HTR1)

Parts List on PL6.1

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Fuser Assembly (REP 10.1).
3. Remove one screw, then remove the cover.

CAUTION

Do not touch the Fuser Heat Rod.

4. Remove the Fuser Heat Rod (Figure 1).

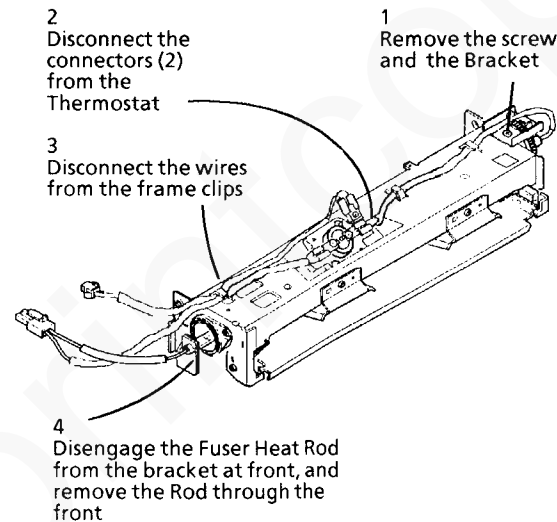


Figure 1. Removing the Fuser Heat Rod

Replacement

1. Install the Fuser Heat Rod with the connector towards the front of copier.

REP 10.3 Fuser Heat Roll

Parts List on PL6.1

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Fuser Assembly (REP 10.1).
3. Remove the Fuser Heat Rod (REP 10.2).
4. Remove the Fuser Heat Roll (Figure 1).

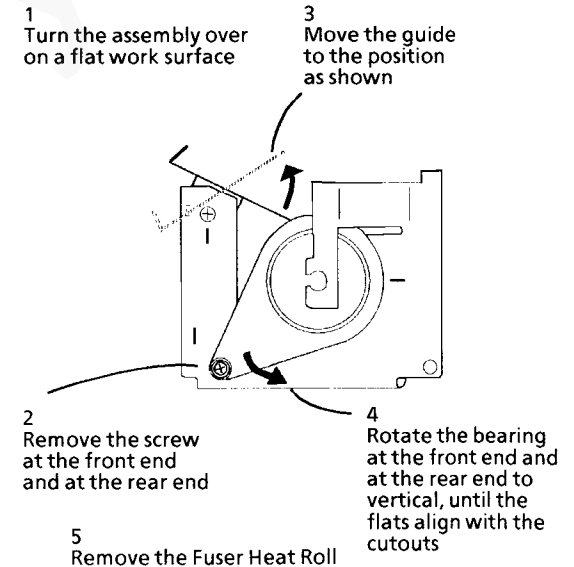


Figure 1. Removing the Fuser Heat Roll

REP 10.4 Overtemperature Thermostat (THS4)

Parts List on PL6.1

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Fuser Assembly (REP 10.1).
3. Remove one screw, then remove the Fuser Cover.
4. Remove the Overtemperature Thermostat (Figure 1).

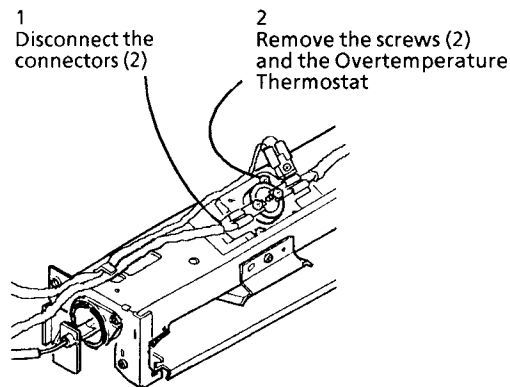


Figure 1. Removing the Overtemperature
Thermostat

REP 10.5 Thermistor (RT1)

Parts List on PL6.1

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Fuser Assembly (REP 10.1).
3. Remove one screw, then remove the cover.
4. Remove the Thermistor (Figure 1).

Remove the screw, then
remove the Thermistor

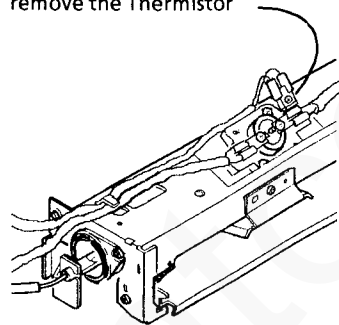


Figure 1. Removing the Thermistor

REP 10.6 Pressure Roll

Parts List on PL6.2

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Fuser Assembly (REP 10.1).
3. Remove the Pressure Roll (Figure 1).

Pivot the Exit Roller Assembly up and out
of the way and then remove the Pressure
Roll

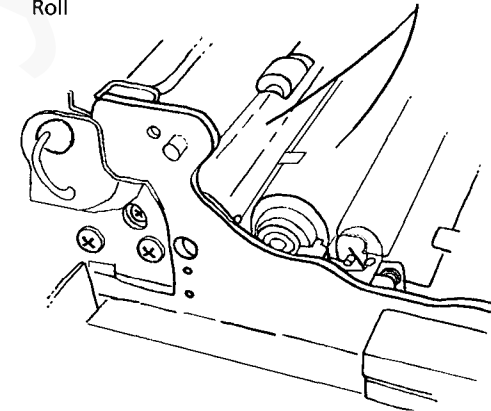


Figure 1. Removing the Pressure Roll

REP 10.7 Fuser Cleaning Roll

Parts List on PL6.2

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Fuser Assembly (REP 10.1).
3. Remove the Fuser Cleaning Roll (Figure 1).

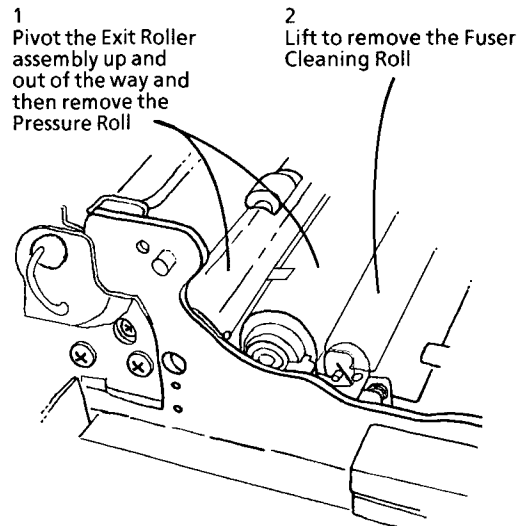


Figure 1. Removing the Fuser Cleaning Roll

REP 10.8 Exit Roller

Parts List on PL6.2

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Fuser Assembly (REP 10.1).
3. Remove the Exit Roller (Figure 1).

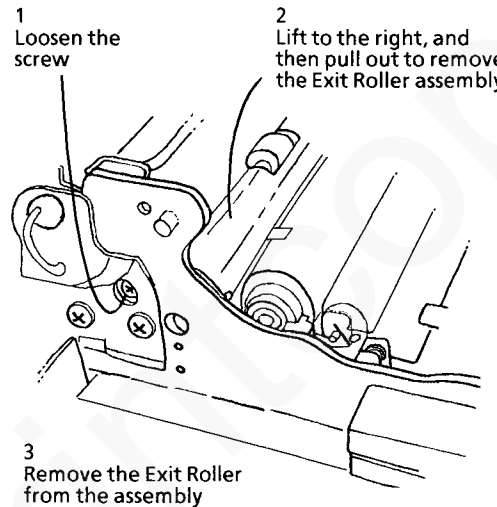


Figure 1. Removing the Exit Roller

REP 10.9 Fuser Roll Cleaning Blade

Parts List on PL6.1

Removal

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Fuser Assembly (REP 10.1).
3. Remove one screw, then remove the cover.
4. Remove the screws (2), the Upper Paper Guides, the support bracket, and the Fuser Cleaning Blade.

Replacement

1. Ensure that the semiperfs on the fuser frame engage the holes on the Fuser Cleaning Blade. Also ensure that the Upper Paper Guides are installed between the semiperfs on the support bracket, and that they are even with the top frame (Figure 1).

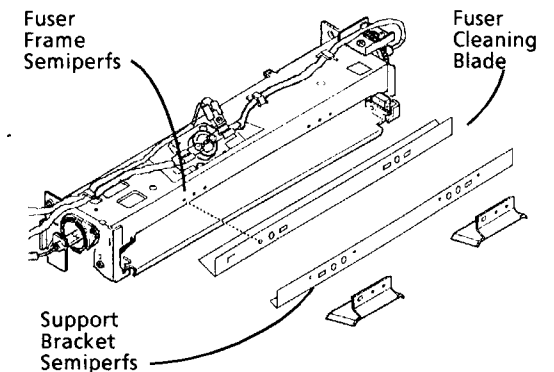


Figure 1. Installing the Fuser Cleaning Blade

REP 14.1 Control Panel Cover

Parts List on PL 1.1

Removal

1. Disconnect the copier power cord.
2. Remove the Control Panel (Figure 1).

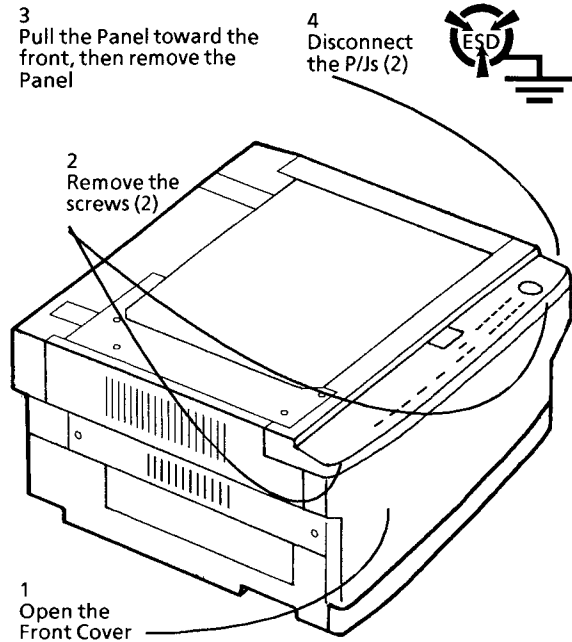


Figure 1. Removing the Control Panel Cover

REP 14.2 Left Cover

Parts List on PL 7.2

Removal

1. Disconnect the copier power cord.
2. Remove the Left Cover (Figure 1).

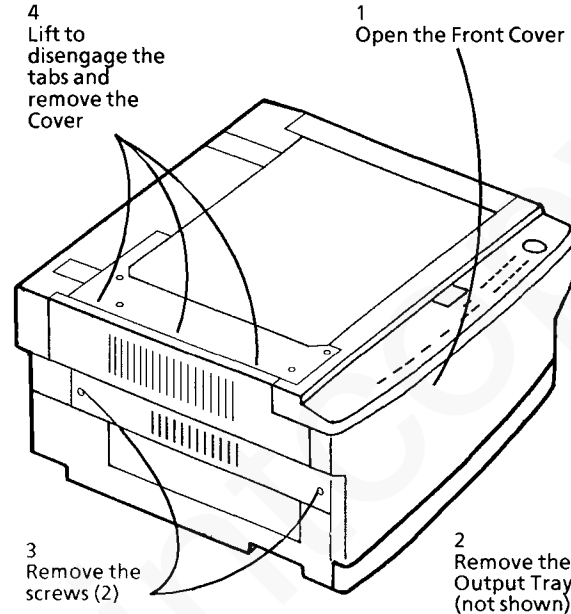


Figure 1. Removing the Left Cover

REP 14.3 Upper Rear Cover

Parts List on PL 7.2

Removal

1. Disconnect the copier power cord.
2. Remove the Control Panel (REP 14.1).
3. Remove the Left Cover (REP 14.2).
4. Open the copier, then remove the Bypass Tray (REP 7.2).
5. Close the copier.
6. Remove the Upper Rear Cover (Figure 1).

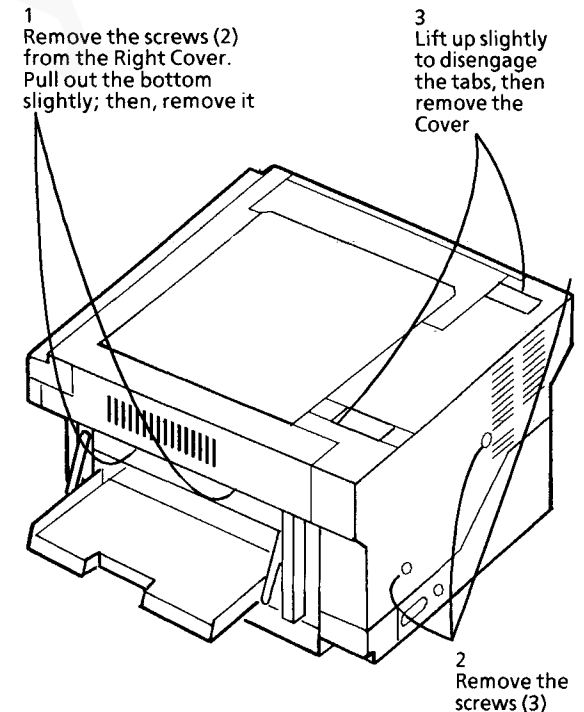


Figure 1. Removing the Upper Rear Cover

REP 14.4 Lower Rear Cover

Parts List on PL7.2

Removal

1. Disconnect the copier power cord.
2. Open the Copier.
3. Remove the Lower Rear Cover (Figure 1).

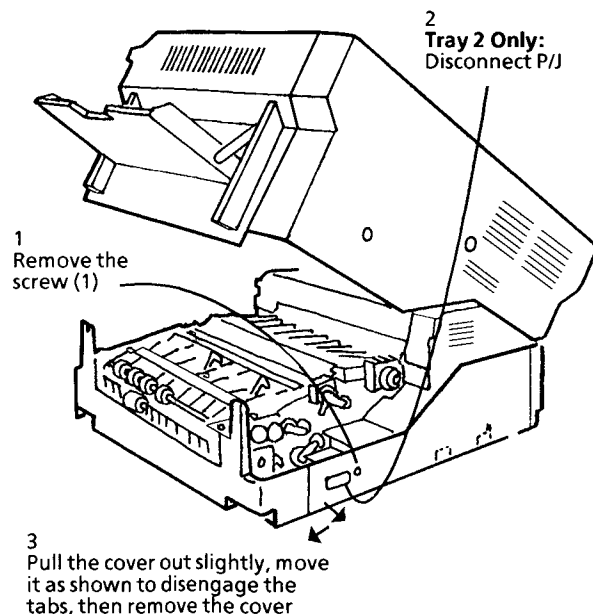


Figure 1. Removing the Lower Rear Cover

Replacement

CAUTION

A screw that is too long will damage the Lower PWB.

REP 14.5 Front Inner Cover

Parts List on PL7.2

Removal

1. Disconnect the copier power cord.
2. Remove the Developer Assembly (REP 9.3).
3. Remove the Photoreceptor Module.
4. Remove the Control Panel (REP 14.1).
5. Remove the Inner Cover (Figure 1).

NOTE: If this screw is removed, copy quality problems will occur when the front end of the Edge Erase Support falls.

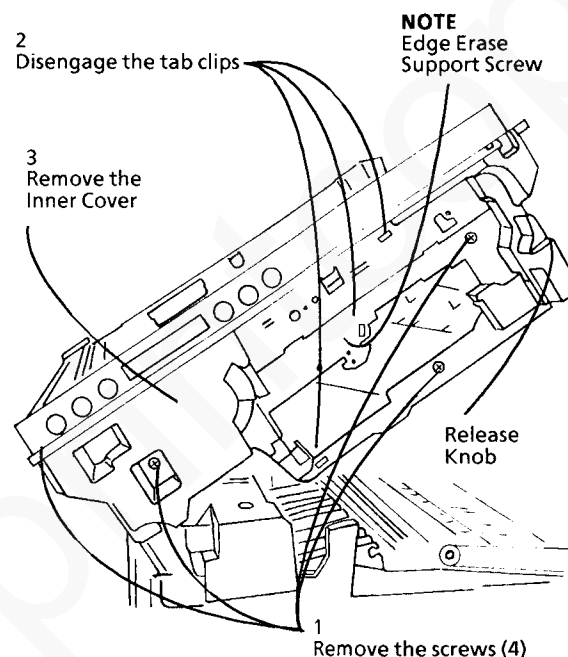


Figure 1. Removing the Inner Cover

Replacement

1. Ensure that the Release Knob is positioned so that the copier opens when the knob is actuated, and the latches (not shown) move to the release position.

ADJ 1.1 Copier Level

Purpose

The purpose is to adjust the level of the copier so that copy quality and copier operation are in specification.

Check

1. Check the front – to – rear level.
 - a. Position the level on the Document Glass as shown and check that no part of the bubble is visible outside one of the level indicator lines (Figure 1).

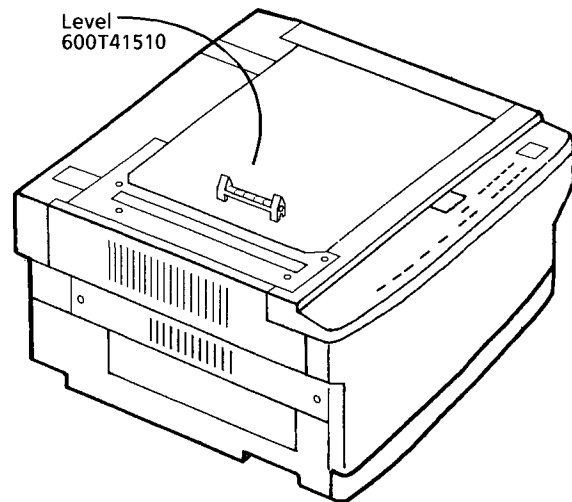


Figure 1. Checking the Front – to – Rear Level

- b. If the end of the bubble is visible outside one of the level indicator lines, the copier is not level. If the copier is not level, the bubble is closest to the end of the copier that is too high. Remember whether the front or the rear is too high, and go to the adjustment.

Adjustment

1. If the copier is on a Xerox stand, go to step 3 (Figure 3)
2. Place leveling pads under the copier as required.

NOTE: If the copier is secured to the customer stand or table, tell the customer that the hardware must be loosened so that the copier can be leveled.

- a. If the front is too high, place a leveling pad under each rear copier base pad.
 - b. If the rear is too high, place a leveling pad under each front copier base pad.

NOTE: Use the following specification as a guideline. The side – to – side copier level is good if 1/2 or more of the bubble is within the level indicator lines. In order to adjust the side – to – side copier level, it may be necessary to place leveling pads under the left or right copier base pads.

- c. Check the copier level and add another pad if required. If the copier is level, install the pads permanently by removing the protective paper cover from the pad and reinstalling the leveling pad(s) with the sticky side toward the copier.
 - d. If the copier was secured to the customer stand or table, reinstall or tighten the hardware.
 - e. Tell the customer the copier should not be moved unless service is called to check the level of the copier.

3. Adjust the level of the copier (Figure 1).
 - a. Loosen the screws as required.
 - b. Install leveling pads under the copier or Tray 2 as required.
 - c. Tighten the screws.
 - d. Check the Copier Level
 - e. If the copier is level, install the pads permanently by removing the protective paper cover from the pad and reinstalling the leveling pad(s) with the sticky side toward the copier.

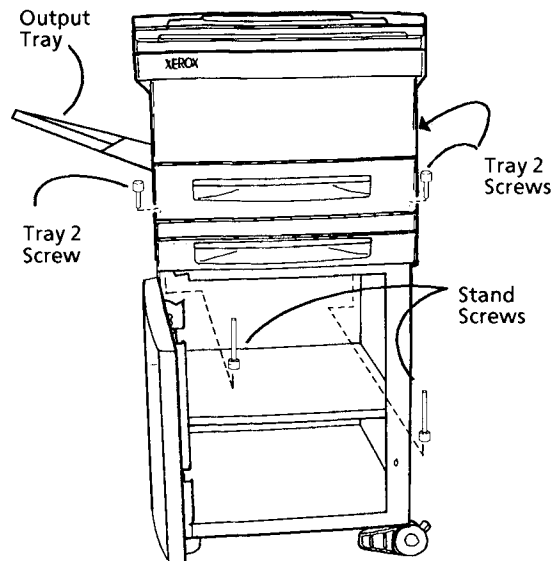


Figure 1. Leveling the Copier

ADJ 5.1 SDF Front-to-Rear

Registration and Skew

Purpose

The purpose is to adjust the position of the SDF so that the front-to-rear registration is correct and without any skew.

Check

1. Register side A of the test pattern on the document glass, select Bypass Tray, and make 5 copies.
2. Check the Baseline Front-to-Rear Registration.
 - a. Check that the graduated mm scales that are on the front and rear edges of the copy are centered on the copy (Figure 1). If they are not, adjust the Baseline Front-to-Rear Registration (ADJ 6.11) before continuing to step 3 of this procedure.

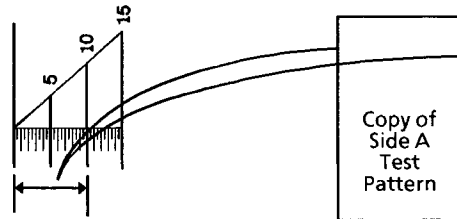
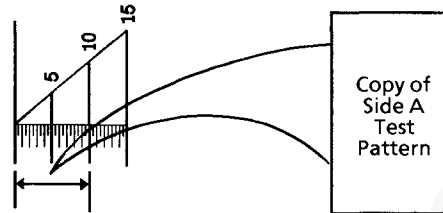


Figure 1. Checking the Baseline Front-to-Rear Registration

3. Feed side A of the test pattern face down through the SDF.
4. Check the side-to-side registration and the skew (Figure 2).



Check that the 10 mm graduated line is 10 mm \pm 1.6 mm from the front edge of the copy at both positions

Figure 2. Checking the SDF Front-to-Rear Registration / Skew

Adjustment

1. Adjust the SDF.
 - a. Loosen the screws (2) slightly that are on the Left Counterbalance of the SDF.
 - b. Reposition the SDF and repeat the check for front-to-rear registration and skew.
 - c. Tighten the screws.

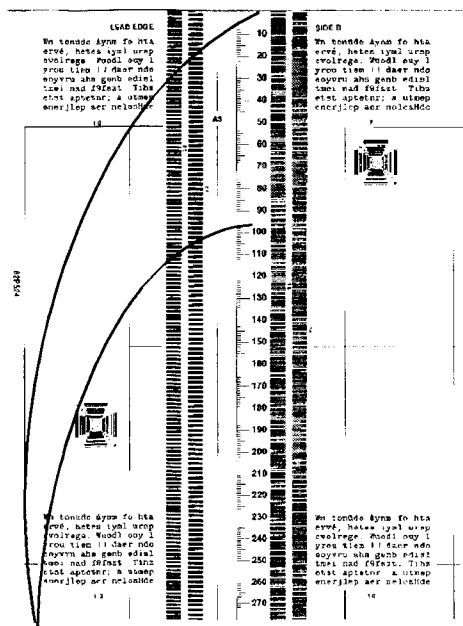
ADJ 5.2 SDF Magnification

Purpose

The purpose is to adjust the lead edge to trail edge magnification for the SDF.

Check

1. Select 100% magnification.
2. Feed side B of the test pattern through the SDF.
3. Check the copy. Compare the mag scale of the copy with the scale on the test pattern (Figure 1).



The 0 to 100 marks on the mag scale on the copy align with the 0 to 100 marks on the test pattern

Figure 1. Checking the SDF Magnification

Adjustment

1. Enter [20-8].
2. Increase the value that is displayed in order to increase the size of the copy. Decrease the value in order to decrease the size of the copy.
3. Exit the Diagnostic Mode.

ADJ 5.3 SDF Exposure

Purpose

The purpose is to adjust the exposure of copies made using the SDF so that they are the same as copies made using the Document Glass.

Check

1. Check the Exposure Level (ADJ 6.1).
2. Select 100% magnification and Text copy mode.
3. Make 3 copies using the SDF.
4. Check the third copy. The .20 line pairs are just visible and the .10 line pairs are not visible.

Adjustment

1. Enter [20-15].
2. Increase the value that is displayed in order to increase the exposure of the copy (make the copy lighter).
3. Repeat the check.
4. Exit the Diagnostic Mode.

ADJ 6.1 Exposure Level

Purpose

The purpose is to adjust the density of each copy mode.

Check

1. Select the **Text** copy mode (Figure 1).
2. Make three copies of side A of the test pattern.
3. Check the third copy. The **.20** line pairs are just visible and the **.10** line pairs are not visible (Figure 2).
4. Select the **Photo** copy mode (Figure 1).
5. Make three copies of side A of the test pattern.
6. Check the third copy. The **.20** line pairs are just visible and the **.10** line pairs are not visible (Figure 2).
7. Select the **Auto** copy mode (Figure 1).
8. Make three copies of side A of the test pattern.
9. Check the third copy. The **.20** line pairs are just visible and the **.10** line pairs are not visible (Figure 2).
10. If the checks of the exposure levels are not correct, perform the adjustment.

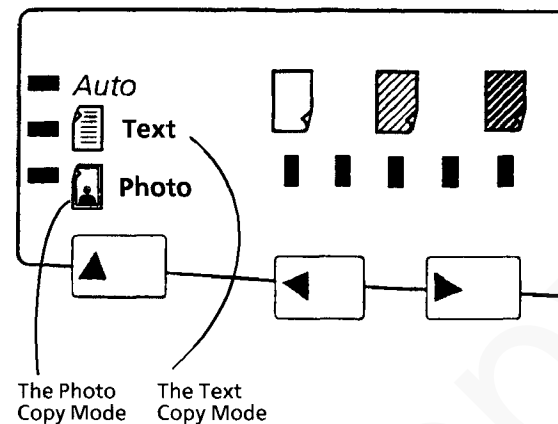


Figure 1. The Copy Modes

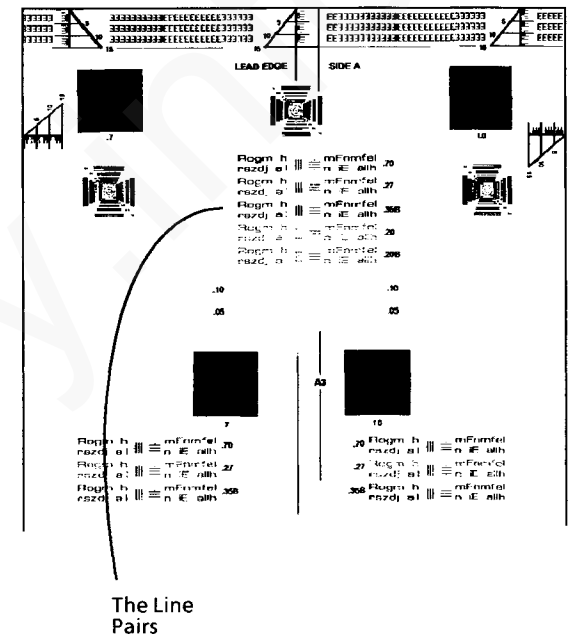


Figure 2. The Copy Density

Adjustment

NOTE: Prior to performing the exposure level adjustment, the Auto Exposure Sensor must first be calibrated. The first 2 steps of the following procedure perform the calibration. During step 2, disregard the display. Raise the Document Cover or SDF slightly to see the light of the Exposure Lamp.

1. Cover all the Document Glass with paper and close the Document Cover or SDF.
2. Enter [20-5] and then press the Start button twice and wait until the Exposure Lamp switches off before going to step 3.
3. Remove the paper and place side A of the test pattern on the Document Glass.
4. Enter 20-4 and then press the Start button. Text copy mode and Copy Lighter is selected. The value that is displayed represents the presently set exposure value.
5. Press the Start button in order to make a copy.
6. The exposure is correct if the .35B line pair is visible, and the .27 line pair is not visible.

If the .35B line pair is not visible, use the quantity select buttons to decrease the exposure value.

If the .27 line pair is visible, use the quantity select buttons to increase the exposure value.

Press the Start button in order to set the new exposure value and to make another copy.

7. Select copy darker and press the Start button in order to make a copy (Figure 3).
8. The exposure is correct if the .10 line pair is visible, and the .05 line pair is not visible.

If the .10 line pair is not visible, use the quantity select buttons to decrease the exposure value.

If the .05 line pair is visible, use the quantity select buttons to increase the exposure value.

Press the Start button in order to set the new exposure value and to make another copy.

NOTE: Copy Normal is automatically adjusted when copy darker and copy lighter are adjusted.

9. Select the Photo mode (Figure 3).
10. Ensure that the copy lighter is selected and make a copy.
11. Adjust the exposure level so that the .35B line pair is visible and the .27 line pair is not visible.
12. Select the copy darker and make a copy.
13. Adjust the exposure level so that the .10 line pair is visible and the .05 line pair is not visible.

14. Press the Auto mode (Figure 3).
15. Select the copy lighter and check that the exposure level is set to 0. If it is not set to 0, set it to 0. Then, press the Start button. Do not check the copy quality.
16. Select the copy darker and make a copy.
17. Adjust the exposure level so that the .20 line pair is visible and the .10 line pair is not visible.
18. Exit the Diagnostic Mode.

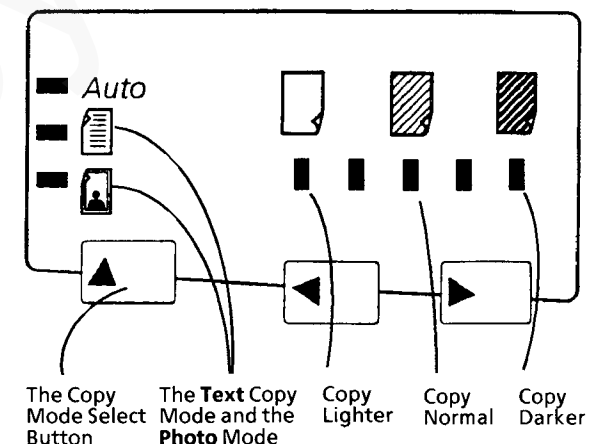


Figure 3. Selecting the Modes

ADJ 6.2 Magnification

Purpose

The purpose is to adjust the front to rear and the lead edge to trail edge magnification.

Check

1. Place the test pattern, side B, on the Document Glass with the short edge positioned against the Left Registration Edge.
2. Select 100% magnification, and a copy quantity of 3. Press the **Start** button.
3. Check the third copy. Compare the magnification scale of the copy with the scale on the test pattern (Figure 1).
4. Place the test pattern, side B, on the Document glass with the short edge positioned against the Rear Registration Edge (test pattern short edge toward the rear of the glass).
5. Select 100% magnification, and a copy quantity of 3. Press the **Start** button.
6. Check the third copy. Compare the magnification scale of the copy with the scale on the test pattern (Figure 1).

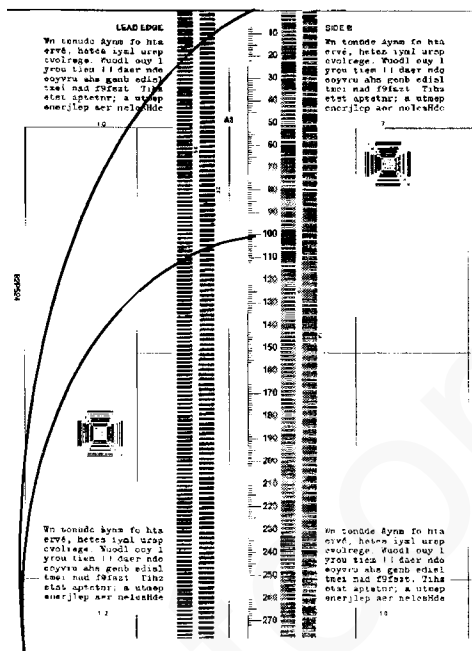


Figure 1. Checking the Magnification

Adjustment

1. Enter [20-6] (front to rear magnification). Increase the value that is displayed in order to increase the magnification. Decrease the value in order to decrease the magnification.
2. Enter [20-7] (lead edge to trail edge magnification). Increase the value that is displayed in order to increase the magnification. Decrease the value in order to decrease the magnification.

ADJ 6.6 Mirror 4/5 Cam (R/E only)

Purpose

The purpose is to adjust the Mirror 4/5 Cam so that it is aligned with the Lens Drive Pulley.

Check

1. **Document Cover only:** Remove the Document Cover.
2. **SDF Only:** Remove the SDF (REP 5.1).
3. Remove the Document Glass (REP 6.1).
4. Remove the Lens Cover (REP 6.10).
5. Check the Mirror 4/5 Cam (Figure 1).

CHECK

The hole in the Mirror 4/5 Cam and the hole in the Lens Drive Pulley are aligned

ADJUST

1
Loosen the screws (2)

2
Adjust the cam and then tighten the screws

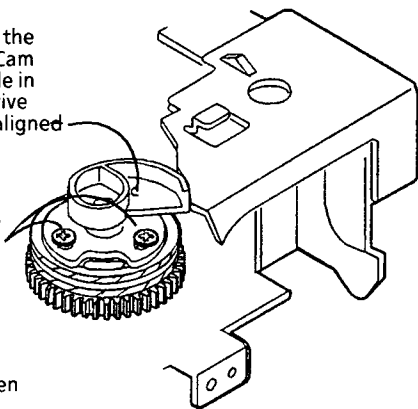


Figure 1. Checking and Adjusting the Mirror 4/5 Cam

Adjustment

1. Adjust the Mirror 4/5 Cam (Figure 1).
2. Check the Magnification (ADJ 6.2).

ADJ 6.7 Full Rate and Half Rate Carriage

Purpose

The purpose is to adjust the Half Rate Carriage and the Full Rate Carriage so that they are parallel to the frame.

Check

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Document Glass (REP 6.1).
3. Check the Full Rate and Half Rate Carriage parallelism (Figure 1).

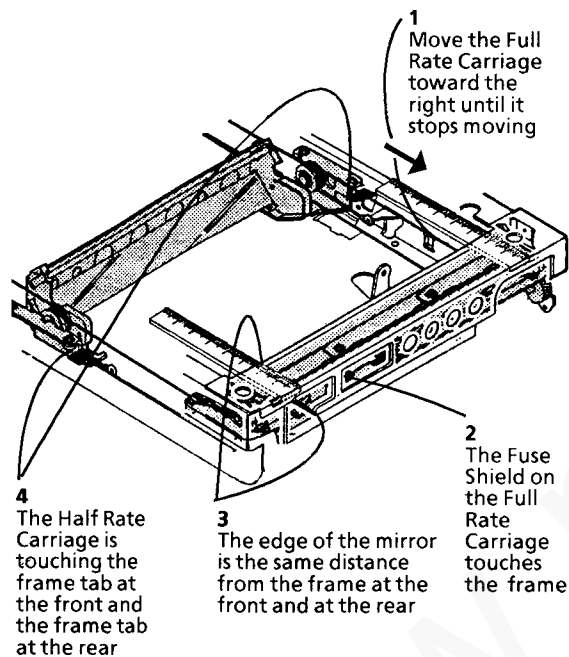


Figure 1. Checking the Full Rate and Half Rate Carriage parallelism

Adjustment

1. If the Full Rate Carriage is misadjusted and the Half Rate Carriage is good, go to step 4. Otherwise, go to step 2.
2. Remove the Control Panel (REP 14.1).
3. Adjust the Half Rate Carriage (Figure 2).
 - a. Loosen the screws (2) that secure the Optics Cables to the bottom of the Full Rate Carriage.
 - b. If the Half Rate Carriage is not touching the front frame tab, loosen the hex screws in the pulleys, hold the pulley shaft, push the Half Rate Carriage against the stop, and then tighten the hex screws.
 - c. If the Half Rate Carriage is not touching the rear frame tab, loosen the hex screw in the pulley, hold the pulley shaft, push the Half Rate Carriage against the stop, and then tighten the hex screw.

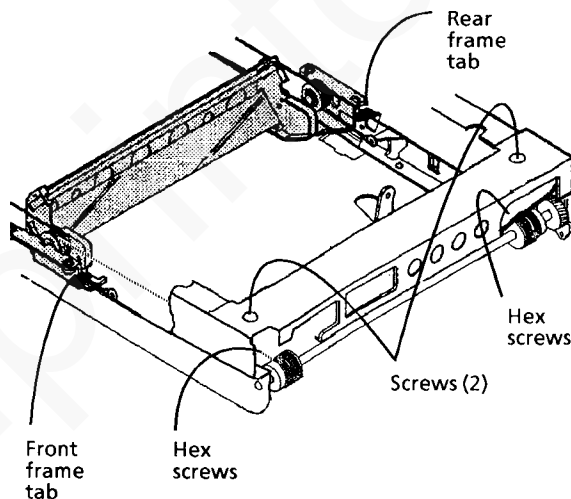


Figure 2. Adjusting the Half Rate Carriage

4. Adjust the Full Rate Carriage (Figure 3).
 - a. If step 3 was skipped, loosen the screws (2) that secure the Optics Cables to the bottom of the Full Rate Carriage.
 - b. Adjust the Full Rate Carriage so that the edge of the mirror is the same distance from the frame at the front and at the rear, while ensuring that the Fuse Shield is against the frame, and then tighten the screws.

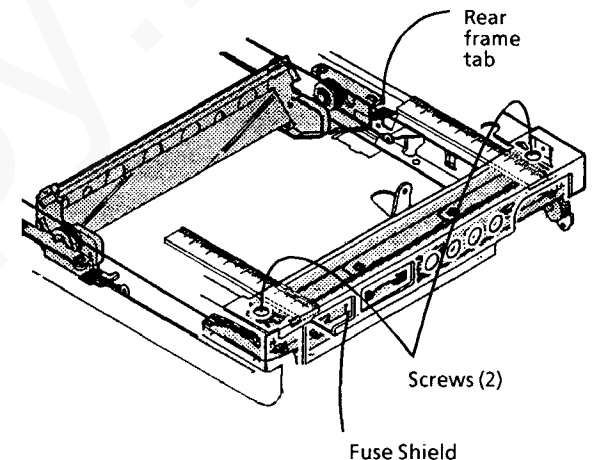


Figure 3 . Adjusting the Full Rate Carriage

ADJ 6.8 Scan Rail (Half Rate Carriage)

Purpose

The purpose is to adjust the front Scan Rail so that the Half Rate Carriage is level with the optics frame.

Check

1. Make a copy of side B of the test pattern using the longest paper available.

NOTE: Entry to this adjustment is from a RAP or adjustment.

2. Compare the copy to the examples in the figure below. Go to the Adjustment if the image is skewed as shown below (Figure 1).

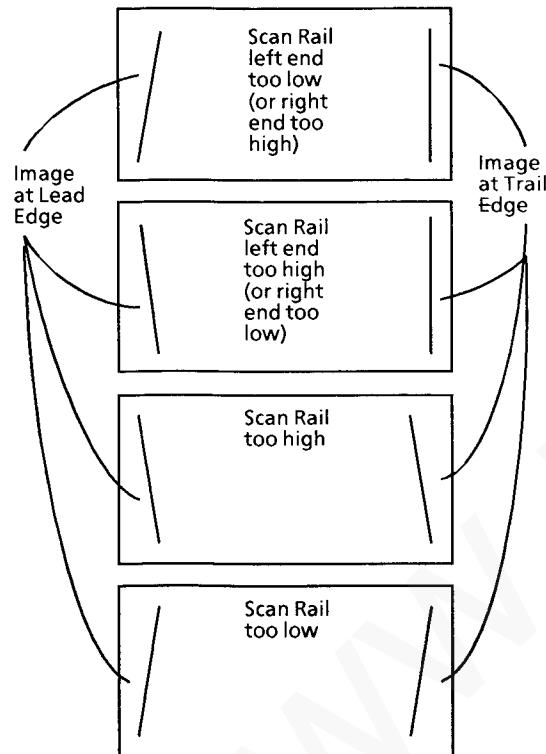


Figure 1. Checking the Image

Adjustment

NOTE: Perform this adjustment only if directed to do so. This adjustment is set during manufacture and cannot be performed with optimal results without special equipment. This adjustment assumes that the Mirror 4/5 Carriage adjustment (ADJ 6.10) is correct or undisturbed before this service call.

If the adjustment of the Mirror 4/5 Carriage is unknown (in the up and down direction) as a result of service actions on the Mirror 4/5 carriage, perform the Coarse Scan Rail adjustment now (ADJ 6.9), then the Mirror 4/5 Carriage adjustment (ADJ 6.10), and then return here.

1. Open the front cover and swing out the Dry Ink Cartridge.
2. Loosen the screws, adjust the Scan Rail, and then tighten the screws (Figure 2).

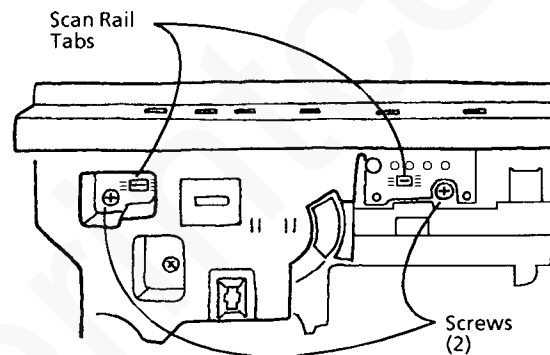


Figure 2. Adjusting the Scan Rail

ADJ 6.9 Scan Rail Coarse (Half Rate Carriage)

Purpose

The purpose is to adjust the front Scan Rail to an approximate position so that the Mirror 4/5 Carriage can be adjusted.

NOTE: Perform this check or adjustment only if directed to do so. This adjustment is set during manufacture and cannot be performed with optimal results without special equipment. This adjustment is only required if at least one component from each bullet statement below has been moved (in the up or down direction) as a result of service actions.

- The Scan Rail or a component that supports the Half Rate Carriage and the mirrors in the up and down direction.
- The Mirror Position Cam or a component that supports the Mirror 4/5 Carriage or the mirrors in the up and down direction.

Check

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Left Cover (REP 14.2).

3. Check that the measurement from the bottom of the Half Rate Carriage to the base of the optics housing is the same at the front and at the rear (Figure 1).

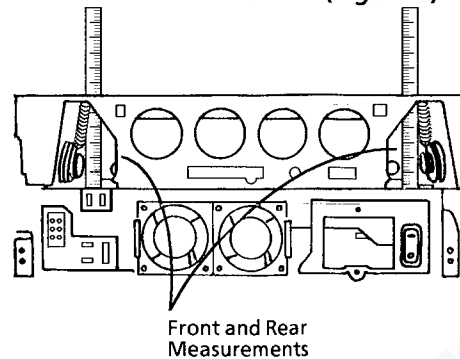


Figure 1. Checking the Measurements

4. Push the Half Rate Carriage toward the middle of the optics area and repeat the measurement.
5. The measurements should be within 0.5 mm.

Adjustment

1. Adjust the Scan Rail (Figure 2).
 - a. Loosen the screws (2).
 - b. Adjust the Scan Rail Tab where the Half Rate Carriage is positioned at this time and then tighten the screw enough to hold the Scan Rail.
 - c. Push the Half Rate Carriage to the other position and then repeat step b.

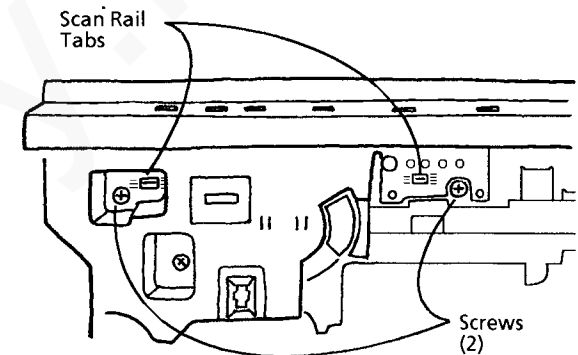


Figure 2. Adjusting the Scan Rail

2. Check the Mirror 4/5 Carriage (ADJ 6.10).

ADJ 6.10 Mirror 4/5 Carriage Level

Purpose

The purpose is to adjust the Mirror 4/5 Carriage so that it is level with the Half Rate Carriage.

NOTE: The Mirror 4/5 Carriage adjustment assumes that the adjustment of the Half Rate Carriage is correct. If the adjustment of the Half Rate Carriage is unknown (in the up and down direction) as a result of service actions (for example, the front Scan Rail moved during this service call), perform the Scan Rail Coarse (Half Rate Carriage) adjustment (ADJ 6.9) now, and then return here.

Check

1. Make a copy of side B of the test pattern using the longest paper available.
2. Compare the copy to the examples in the figure below. Go to the Adjustment if the image is skewed as shown below (Figure 1).

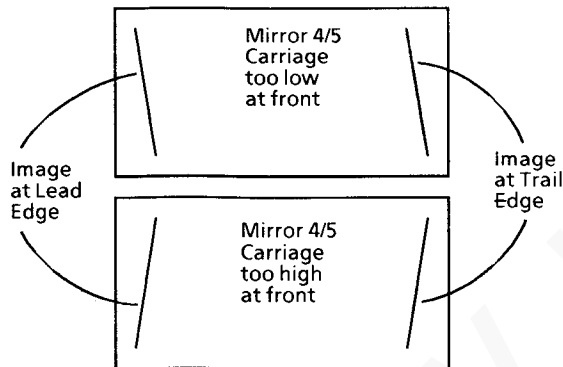


Figure 1. Checking the Image

Adjustment

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Document Glass (REP 6.1).
3. Remove the Lens Cover (REP 6.10).
4. Adjust the Mirror Position Cam (Figure 2).

Rotate the
Mirror
Position Cam

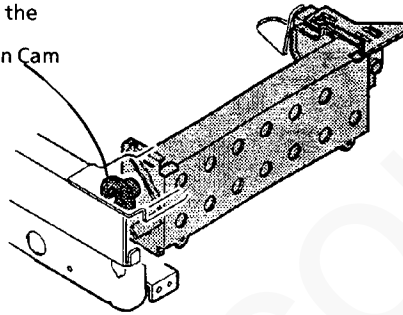


Figure 2. Adjusting the Mirror Position Cam

5. Check the Scan Rail (Half Rate Carriage) (ADJ 6.8).

ADJ 6.11 Baseline Front-to-Rear Registration (R/E only)

Purpose

The purpose is to adjust the lens position so that the image is centered between the front and rear edges of the copy.

Check

1. Register side A of the test pattern on the Document Glass, select Bypass Tray, and make 5 copies.
2. Check that the graduated mm scales that are on the long edges of the copy are centered on the copy.

Adjustment

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Document Glass (REP 6.1).
3. Remove the Lens Cover (REP 6.10).
4. Loosen the screws (2) and move the Lens Guide as shown to move the image on the copy paper as shown.

NOTE: Ensure the pin on the bottom of the lens assembly engages the slot in the Lens Guide.(Figure 1).

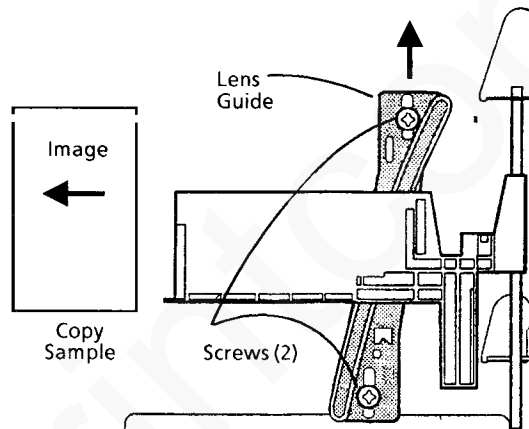


Figure 1. Adjusting the Lens Guide

5. Adjust the Paper Tray Front – to – Rear Registration (ADJ 8.4).
6. **SDF Only:** Adjust the SDF Front – to – Rear Registration and Skew (ADJ 5.1).

ADJ 6.12 Resolution (R/E only)

Purpose

The purpose is to adjust the Mirror 4/5 Carriage so that the copy meets the specification for resolution.

Check

1. Make a copy of side A of the test pattern.
2. Check that the 3.5 LP/mm arrays for the resolution targets are completely resolved (Figure 1).

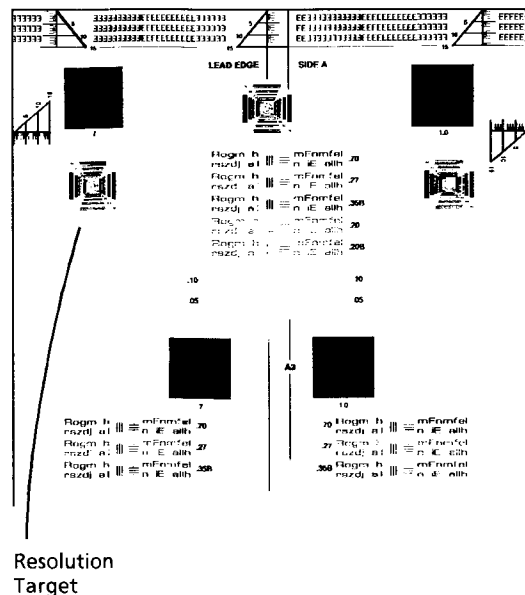


Figure 1. Checking the Resolution

Adjustment

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Document Glass (REP 6.1).
3. Remove the Lens Cover (REP 6.10).
4. Adjust the resolution (Figure 2).

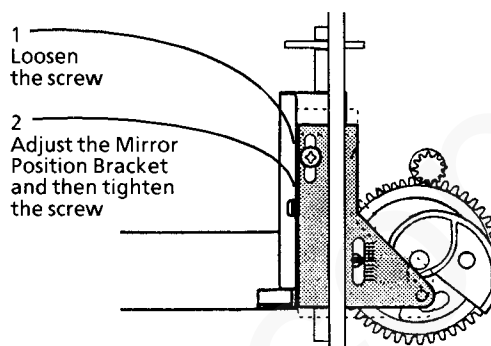


Figure 2. Adjusting the Resolution

5. Check the Magnification (ADJ 6.2).
6. Check the Baseline Front – to – Rear Registration (R/E only) (ADJ 6.11).

ADJ 6.13 Exposure Lamp Shades (Baffles)

Purpose

The purpose is to adjust the Exposure Lamp Shades so that the density is even from the front to the rear of the copy.

Check

1. Make a copy of side A of the test pattern.
2. Check that the density is even from the front to the rear of the copy.

Adjustment

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Remove the Document Glass (REP 6.1).
2. Make a mark of the position of the lamp shades.
3. Loosen the screws and adjust the lamp shades as required in order to open or close the opening that is to the left of the Exposure Lamp (Figure 1).

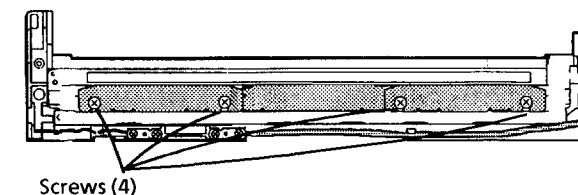


Figure 1. Adjusting the Lamp Shades

ADJ 6.14 Baseline Front-to-Rear Registration (1:1 only)

Purpose

The purpose is to adjust the lens position so that the image is registered on the long edges of the copy paper.

Check

1. Register side A of the test pattern on the Document Glass, select Bypass Tray, and make five copies.
2. Check that the graduated mm scales that are near the front edge and on the rear edge of the copy are centered on the copy.

Adjustment

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Document Glass (REP 6.11) and the Lens Cover (REP 10).
3. Loosen the screws (3) and move the Lens as shown in order to move the image as shown on the copy sample (Figure 1).

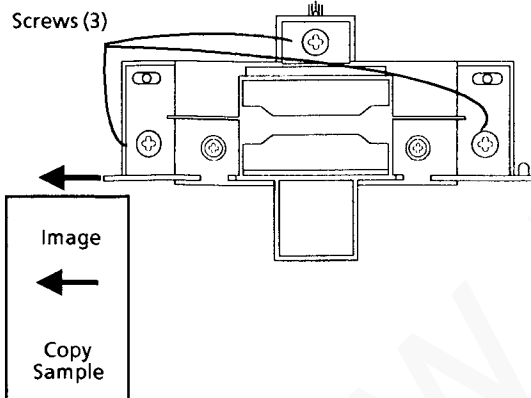


Figure 1. Adjusting the Document Glass Front-to-Rear Registration

4. Adjust the Paper Tray Front-to-Rear Registration (ADJ 8.4).

ADJ 6.15 Resolution (1:1 only)

Purpose

The purpose is to adjust the Mirror 4/5 Carriage Assembly so that the copy meets the specification for resolution.

Check

1. Make a copy of side A of the test pattern.
2. Check that the 3.5 LP/mm arrays for the resolution targets are completely resolved (Figure 1).

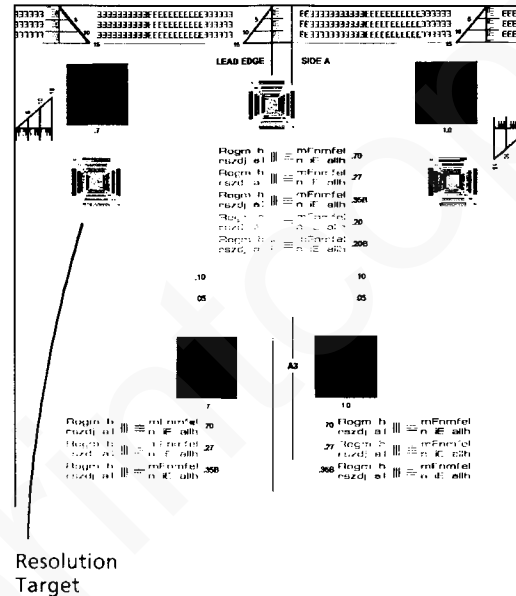


Figure 1. Checking the Resolution

Adjustment

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Document Glass (REP 6.1) and the Lens Cover (REP 6.10).
3. Adjust the resolution (Figure 2).

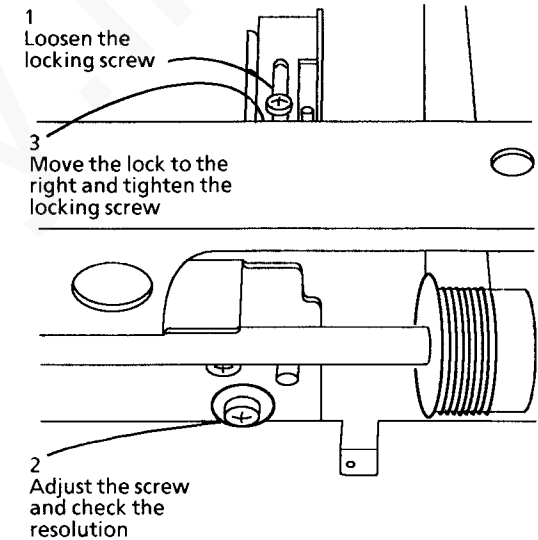


Figure 2. Adjusting the Resolution

ADJ 6.16 Lens Cable

Purpose

The purpose is to adjust the Lens Cable to enable a range of adjustment for the Resolution adjustment.

Check

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

1. Disconnect the copier power cord.
2. Remove the Bypass Tray Assembly (REP 7.2).
3. Remove the Document Glass (REP 6.1) and the Lens Cover (REP 6.10)
4. Check the Lens Cable (Figure 1).

NOTE: In step 1 of Figure 1, the 2mm Hex Wrench will fit loosely. Position the wrench as shown before going to step 2.

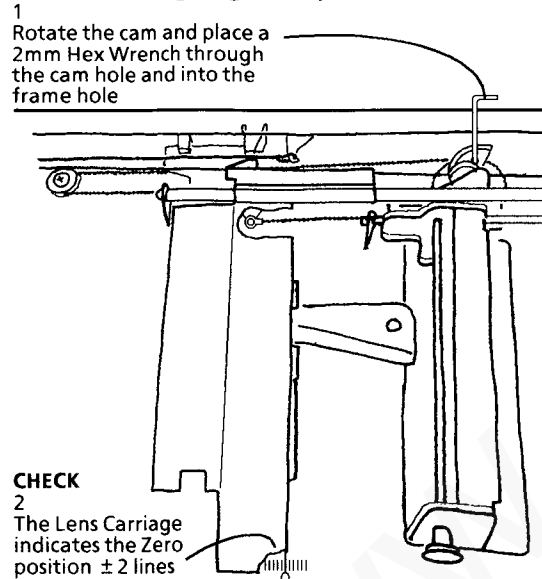


Figure 1. Checking the Lens Cable

Adjustment

1. Adjust the Lens Cable (Figure 2).

NOTE: In step 3 of Figure 1, the 2mm Hex Wrench will fit loosely. Position the wrench as shown before going to the next step.

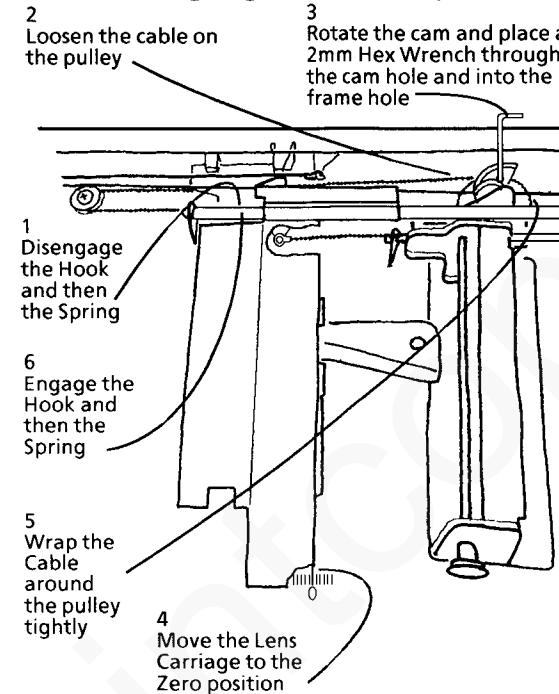


Figure 2. Adjusting the Lens Cable

2. Reassemble the copier.
3. Check the Resolution (R/E only) (ADJ 6.12).
4. Check the Magnification (ADJ 6.2).
5. Check the Baseline Front – to – Rear Registration (R/E only) (ADJ 6.11).

ADJ 6.17 Lens NVM

Purpose

The purpose is to ensure that the value for lens characteristics is recorded in NVM.

Check

1. Enter [20 – 3], press the start button, and record the value.

WARNING

Electrical shock hazard exists if the power cord is not disconnected.

2. Disconnect the copier power cord.
3. Remove the Bypass Tray Assembly (REP 7.2).
4. Remove the Document Glass (REP 6.1) and Lens Cover (REP 6.10).
5. Check the Lens number (Figure 1).

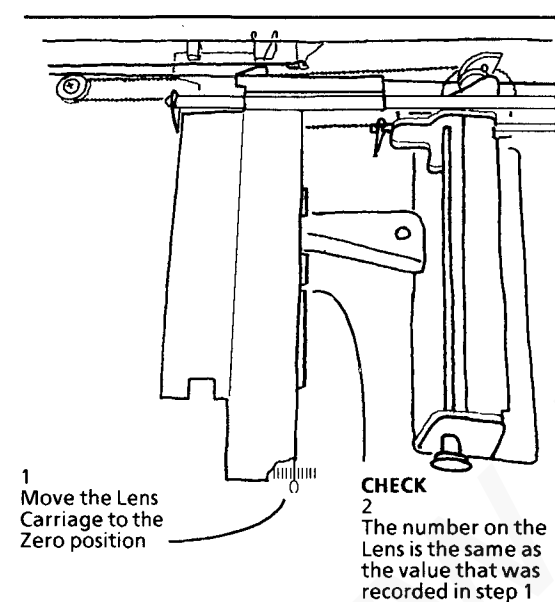


Figure 1. Checking the Lens Number

Adjustment

1. Assemble the copier.
2. Enter [20 – 3] and press the **Start** button.
3. Enter the number for the Lens and press the **Start** button.
4. Exit the diagnostic mode.

ADJ 8.1 Registration Buckle

Purpose

The purpose is to adjust the registration buckle for Tray 1 and also the Bypass Tray so that the registration is the same on all copies and so that the copy paper is not overdriven before the Registration Clutch energizes.

Check

1. If the copier exhibits any of the characteristics listed below, enter 20-10 and enter a 0 and a 5, then press the **Start** button. Then, exit the Diagnostic Mode and go to step 2. If the copier does not exhibit the characteristics listed below, go to step 2 without changing the value in location 20-10.
 - The copier is reported with E1 jams
 - There is a small fold in the middle of the copy
 - The image is skewed or smeared in the middle of the copy
 - There is image deletion in the middle of the copy
2. Select Tray 1 or the Bypass Tray and make 10 copies of side A of the test pattern at 100%.

NOTE: When only Tray 1 is selected, the optional Tray 2 is also adjusted, if present.

3. Check that the Lead Edge Registration does not change more than 0.5 mm among the copies.

Adjustment

1. Enter [20-10]. Select Tray 1 or the Bypass Tray, increase the value by 10, and press the **Start** button.
2. Exit the Diagnostic Mode and repeat steps 2 and 3 of the check.
3. Check the Lead Edge Registration:
with 1:1 (ADJ 8.2)
with R/E (ADJ 8.5)

ADJ 8.2 Lead Edge Registration with 1:1

Purpose

The purpose is to adjust the lead edge registration so that the registration is in specification

Check

1. Make 5 copies of side A of the test pattern at 100%.
2. Check the Lead Edge Registration (Figure 1).

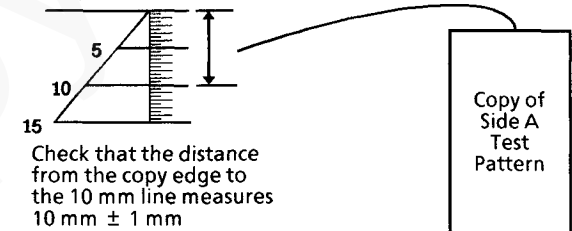


Figure 1. Checking the Lead Edge Registration

3. If the registration changes from copy to copy by more than 0.5 mm, adjust the Registration Buckle (ADJ 8.1). If the registration does not change, go to the adjustment of this procedure.

Adjustment

1. Adjust the Lead Edge Registration.
 - a. Enter 20-9.
 - b. If the measurement made in step 2 of the check is greater than 10 mm, increase the value that is shown in the display, then press the **Start** button. If the measurement is less than 10 mm, decrease the value, then press the **Start** button.

ADJ 8.3 Lead/Trail Edge Deletion

Purpose

The purpose is to adjust the lead edge and the trail edge deletion so that the deletion is in specification

Check

1. Check the lead edge and trail edge deletion from Tray 1 and the Bypass Tray.
 - a. Register side B of the test pattern on the Document Glass, select Tray 1, and make a copy.
 - b. Select the Bypass Tray and make a copy.
 - c. Check that the lead edge deletion is not greater than 3 mm on A4 / 8.5 x 11 size copies and not greater than 1.5 mm on A5 / 5.5 x 8.5 size copies. Check that the trail edge deletion is not greater than 3 mm on A4 / 8.5 x 11 size copies, not greater than 5 mm on A5 / 5.5 x 8.5 size copies, and not greater than 5 mm on duplex copies (Figure 1).

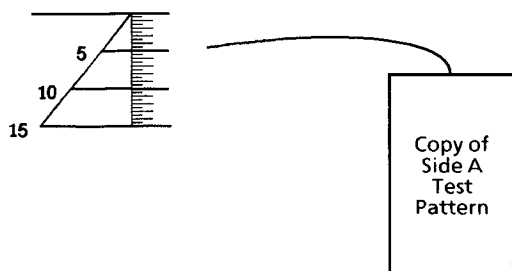


Figure 1. Checking the Edge Deletion

NOTE: The specifications listed in step c are minimum performance capabilities that can be expected of the copier. The customer may prefer more or less lead edge and trail edge deletion and the copier may be adjusted as required.

Adjustment

1. Adjust the deletion.
 - a. Enter 20-11.
 - b. Go to step e to adjust only the trail edge deletion.
 - c. Press the Tray Select button until the Tray 1 LED is on.

CAUTION

Lead Edge Deletion should be at least 1.5 mm to ensure reliable stripping. Stripper finger and fuser roll damage may result with no lead edge deletion. Dry Imager consumption may also be marginally higher.

- d. Enter a smaller value than what is shown in the display to reduce the deletion or a larger value to increase the deletion.
- e. Press the Tray Select button until the Tray 1 LED blinks to adjust Tray 1 Trail Edge Deletion, or press Tray Select button until the Bypass Tray LED is on to adjust Bypass Tray Trail Edge Deletion.
- f. Enter a smaller value than what is shown in the display to reduce the deletion or a larger value to increase the deletion.
- g. Switch off and switch on the copier in order to exit the diagnostic mode.

ADJ 8.4 Paper Tray Front-to-Rear Registration

Purpose

The purpose is to adjust the Registration Block on the Tray 1 and Tray 2, if Tray 2 is present, so that the side-to-side registration is in specification.

Check

1. Register side A of the test pattern on the Document Glass, select Bypass Tray and 100%, and make five copies.
2. Check the Baseline Front-to-Rear Registration.
 - a. Check that the graduated mm scales that are on the front and rear edges of the copy are centered on the copy (Figure 1). If they are not, and the copier is equipped with R/E, adjust the Baseline Front-to-Rear Registration (ADJ 6.11), then return here to step 3. If they are not, and the copier is a 1:1 copier, go to step 3. .

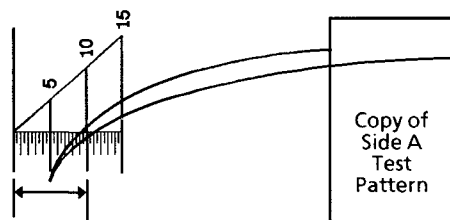
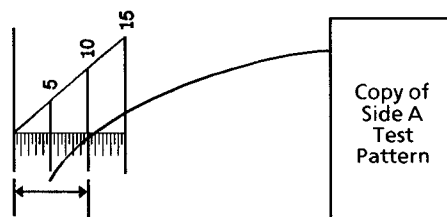


Figure 1. Checking the Baseline Front-to-Rear Registration

3. Select Tray 1 or Tray 2 and make a copy.

4. Check the Paper Tray Front-to-Rear Registration. (Figure 2).



Check that the 10 mm graduated line is 10 mm \pm 1.6 mm from the front edge of the copy

Figure 2. Checking the Paper Tray Front-to-Rear Registration

Adjustment

1. Adjust the Paper Tray Front-to-Rear Registration (Figure 3).

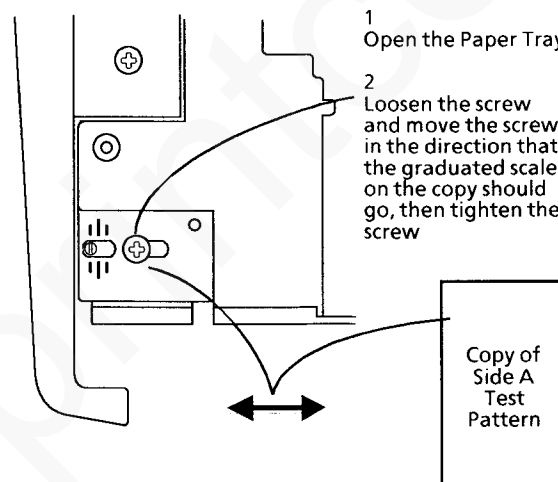


Figure 3. Adjusting the Paper Tray Front-to-Rear Registration

ADJ 8.5 Lead Edge Registration

R/E

Purpose

The purpose is to adjust the image alignment between a 64% copy and a 129% copy so that the Lead Edge Registration is correct for any selection of reduction or enlargement.

If the copier is equipped with SDF, ADJ 8.6 is used to align the SDF registration.

Check

1. Make 5 copies of side A of the test pattern at 100% using the Document Glass to manually register the test pattern.
2. Check the Lead Edge Registration (Figure 1).

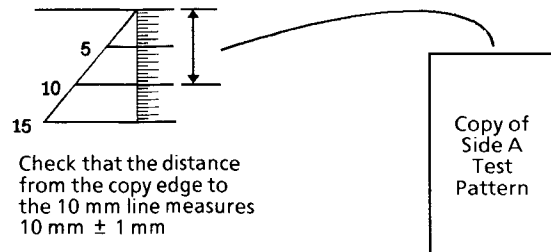


Figure 1. Checking the Lead Edge Registration

3. If the registration changes from copy to copy more than 0.5 mm, adjust the Registration Buckle (ADJ 8.1).

If the registration does not change or vary from copy to copy, go to the adjustment of this procedure.

Preliminary Adjustment Setup

1. Enter 0 in the 3 NVM locations for registration.
 - a. Enter [20 – 9].
 - b. Enter 0.
 - c. Press the Tray Select button until the Tray 1 LED is blinking.
 - d. Enter 0.
2. If SDF is present, go to step 3. If no SDF is present, to to step 4.
3. **Without Tray 2:** Press the **Tray Select** button only once. The Tray 1 lamp is lit. **With Tray 2:** Press the **Tray Select** button until both the Tray 1 and the Tray 2 LED's are lit.
4. Enter 0.

Adjustment

1. Make copy samples.
 - a. Enter [20 – 9].
 - b. Manually register side A of the test pattern on the document glass, select 129%, and press the **Start** button. Label the copy 129.
 - c. Select 64% and press the **Start** button. Label the copy 64.
 - d. Select 100%.
2. Measure the Lead Edge Registration.
 - a. On the copy labeled 64, use a mm scale to measure the distance from the lead edge of the copy paper to the lead edge of the image and record this value on the copy.
 - b. Do the same on the copy labeled 129.

Continued on the next page.

3. Determine and enter the NVM value to adjust the lead edge registration.

- Exit diagnostics and reenter [20 – 9].
- On the top of the Tray 1 LED On Chart, mark the dimension that was measured on the copy labeled 129 (Figure 2).
- On the side of the Tray 1 LED On Chart, mark the dimension that was measured on the copy labeled 64 (Figure 2).
- Find the value in Figure 2 that is aligned with both marks and enter this NVM value.

NOTE: It is not necessary to press the **Start** button after entering the value. The new value is in memory as soon as the value is visible in the display.

Continued on the next page.

64%
Lead
Edge of
Paper
to Lead
Edge of
Image
values
in mm
at 64%

129%																									
Lead Edge of Paper to Lead Edge of Image values in mm at 129%																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-	-	-	-	-	-	-	-	-	-	-
2	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-	-	-	-	-	-	-	-	-	-
3	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-	-	-	-	-	-	-	-	-
4	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-	-	-	-	-	-	-	-
5	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-	-	-	-	-	-	-
6	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-	-	-	-	-	-
7	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-	-	-	-	-
8	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-	-	-	-
9	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-	-	-
10	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-	-
11	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-	-
12	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99	-
13	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91	99
14	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82	91
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74	82
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66	74
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58	66
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49	58
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41	49
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33	41
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25	33
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16	25
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	16
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0

NVM Values

Figure 2. Tray 1 LED On Chart

Continued on the next page.

4. Press the **Tray Select** button once (the Tray 1 LED is blinking).
5. Adjust the registration.
 - a. Select 100% and make a copy.
 - b. Measure from the lead edge of the paper to the 10 mm line. Change the value in the display by 8 for every 1 mm of misregistration.
 - c. **Without SDF:** Procedure is complete.
With SDF: Go to ADJ 8.6.

***NOTE:** It is not necessary to press the **Start** button after entering the value. The new value is in memory as soon as the value is visible in the display.*

ADJ 8.6 SDF Registration

Purpose

The purpose is to align the registration of copies made using the SDF with copies made using the Document Glass.

1. Make 5 copies of side A of the test pattern at 100% using the Document Glass to manually register the test pattern.
2. Check the Lead Edge Registration (Figure 1).

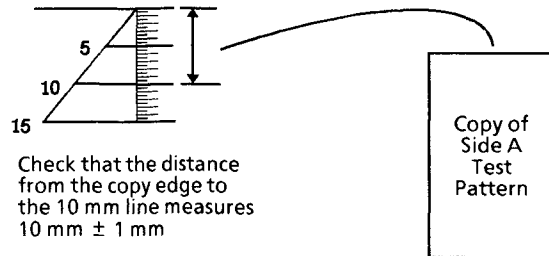


Figure 1. Checking the Lead Edge Registration

3. If the registration changes from copy to copy more than 0.5 mm, adjust the Registration Buckle (ADJ 8.1) and go back to step 1.

Adjustment

1. Adjust the SDF registration.
 - a. Enter [20 – 9] and press the **Tray Select** button twice. If the value is 0, go to step b. If the value is any other number, go to step c.
 - b. Enter 30. Exit diagnostics and reenter [20-9].
 - c. Measure from the lead edge of the paper to the 10 mm line. Change the value in the display by 8 for every 1 mm of misregistration.

NOTE: It is not necessary to press the **Start** button after entering the value. The new value is loaded in memory as soon as the value is visible in the display.

ADJ 9.2 Mag Roll Cam

Purpose

The purpose is to adjust the cam so that the mag roll magnets position the developer into the correct developer brush shape for optimum copy density and minimum dry ink cloud.

Check

1. Remove the Developer Assembly (REP 9.3).
2. Remove the screws (2) and the cover (Figure 1).

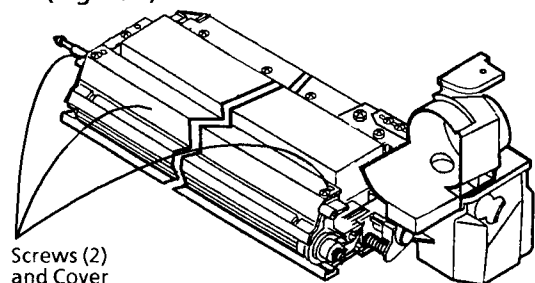


Figure 1. Removing the Screws and the Cover

3. Position the Developer Assembly so that the Mag Roll is facing up.
4. Check the Mag Roll Cam (Figure 2).
 - a. Hold the small screwdriver loosely over the Mag Roll so that the tip of the screwdriver touches the Mag Roll.
 - b. Check that the distance between the tip of the screwdriver and the bottom of the Developer Assembly measures $15\text{ mm} + 0.5\text{ mm} - 0.0\text{ mm}$.

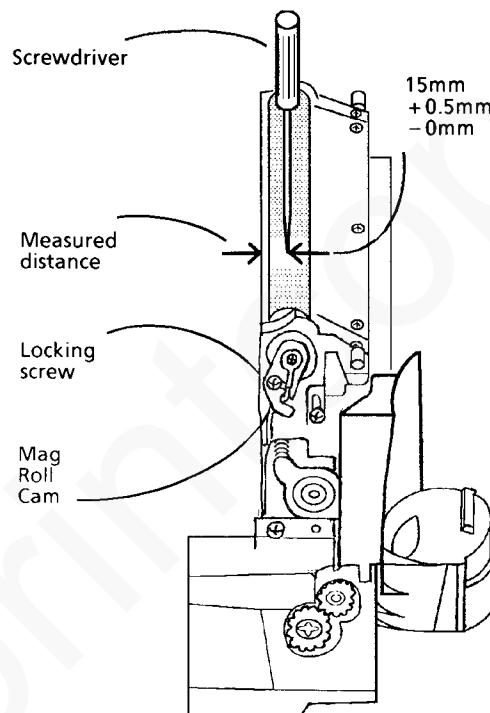


Figure 2. Checking and Adjusting the Mag Roll Cam

Adjustment

1. Adjust the Mag Roll Cam (Figure 2).
 - a. Loosen the locking screw.
 - b. Adjust the Mag Roll Cam so that the distance is correct.
 - c. Tighten the locking screw.

ADJ 10.1 Fuser Temperature

Purpose

The purpose is to adjust the Fuser temperature so that the copies are fused correctly.

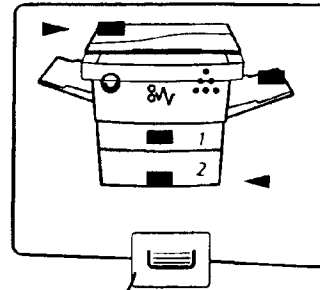
Check

1. Enter [20-2].
2. The value that is displayed represents the last two digits of the presently set fuser temperature (example: 90 equals 190, 00 equals 200 degrees C).

Adjustment

NOTE: The Fuser temperature can be adjusted in five degree intervals.

1. Press the Copier Diagram Button on the Control Panel (Figure 1) in order to change the temperature setting to one of the following selections:
75, 80, 85, 90, 95, or 00



The Copier
Diagram
Button

Figure 1. The Copier Diagram Button

2. Press the **Start** button in order to set the new fuser temperature selection.
3. Exit the Diagnostic Mode.

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5. Lista de piezas

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VISIÓN GENERAL

La sección de listas de piezas identifica la localización de todos los componentes de repuesto de subsistemas y las listas de números de pieza correspondientes.

ORGANIZACIÓN

LISTAS DE PIEZAS

Cada elemento de la lista de piezas tiene un número que corresponde a una pieza de una ilustración. Todas las piezas de un subsistema dado de la máquina se localizarán en una misma ilustración o en una serie de ilustraciones relacionadas.

CONECTORES ELÉCTRICOS Y SUJETADORES

Esta sección contiene ilustraciones y descripciones de los conectores, enchufes y sujetadores usados en esta máquina. Se incluye una lista de números de pieza de los mismos.

TORNILLERÍA COMÚN

La tornillería común está en orden alfabético según la letra o letras usadas para identificar cada pieza en la lista de tornillería y en las ilustraciones. Todas las dimensiones se dan en milímetros, a menos que se indique lo contrario.

ÍNDICE NUMÉRICO DE PIEZAS

En este índice se presentan todas las piezas de repuesto del sistema en orden numérico. Cada número es seguido por una referencia a la lista de piezas en la cual se puede encontrar dicha pieza.

INFORMACIÓN GENERAL

ABREVIATURAS

Las abreviaturas se usan en las listas de piezas y las ilustraciones de despiece para proporcionar información en un espacio limitado. En este manual se usan las siguientes abreviaturas:

A	Amp
DH	Alimentador de documentos
EMI	Inducción electromagnética
HZ	Hertz
MNL	Multinacional
NOHAD	Ruido/Ozono/Calor/ Aire/Suciedad
P/O	Parte de
PWB	Placa de cableado impreso
REF	Referencia
R/E	Reducción/Ampliación
RX	Rank Xerox
USMG	United States Marketing Group
USO	United States Operations
V	Voltio
W/	Con
W/O	Sin
XCL	Xerox de Canadá
XLA	Xerox de Latinoamérica

SÍMBOLOS

Los símbolos que se usan en las listas de piezas se identifican en la sección Símbolos.

INFORMACIÓN SOBRE LOS SUBSISTEMAS

USO DEL TÉRMINO "CONJUNTO"

El término "conjunto" se usará para los elementos de la lista de número de piezas que incluyen otras piezas detalladas en la lista de número de pieza. Cuando se encuentra el término "conjunto" en la lista de número de pieza, habrá un número de pieza correspondiente en las ilustraciones seguidas por un paréntesis y una lista de los componentes del conjunto.

Paréntesis

Se usa cuando un conjunto o el kit es de repuesto, pero no se muestra en la ilustración. El número de pieza del conjunto o kit precede al paréntesis; los números de pieza de las piezas siguen al paréntesis.

Modificación

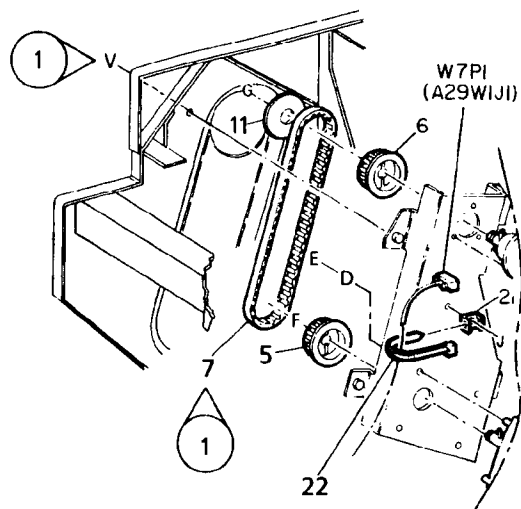
La notación "W/Tag" en la descripción de las piezas indica que la configuración de la pieza ha sido actualizada. Vaya al índice de modificaciones en la sección de Información general de Datos de servicio para ver el nombre y propósito de la modificación.

En algunos casos, una pieza o un conjunto puede ser de repuesto en dos versiones: con la modificación y sin la modificación. En cualquiera de los casos, use la parte adecuada para la configuración de la máquina en la cual se va a instalar la pieza. Si la máquina no tiene una modificación específica y la única pieza de montaje disponible se indica como "W/Tag" (con modificación), instale el kit de modificación o todas las piezas. El índice de modificaciones le dice qué kit o piezas necesita.

Siempre que instale un kit de modificación, o todas las piezas que constituye una modificación, marque el número apropiado en la matriz de modificaciones.

SÍMBOLOS

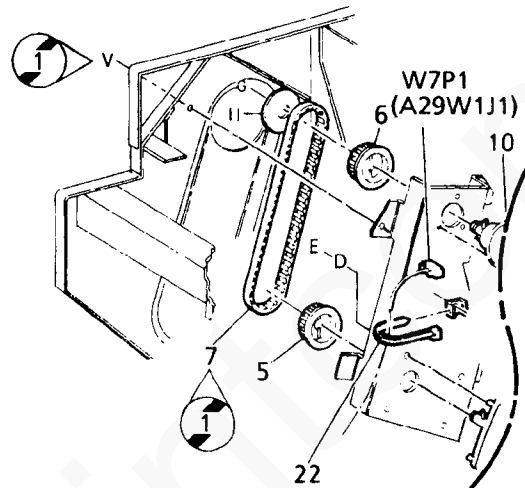
Un número de modificación dentro de un círculo apuntando un número de pieza muestra que la pieza se ha cambiado por el número de modificación que figura dentro del círculo (Figura 1). La información acerca de la modificación se encuentra en el índice de modificaciones.



0	Z004		A
850	PL00	X	1

Figura 1. Simbolo "Con Mod."

Un número de modificación dentro de un círculo que tiene una barra sombreada apuntando un número de pieza muestra que la configuración de la pieza mostrada es la configuración antes de que la pieza fuera cambiada por el número de modificación dentro del círculo (Figura 2).



0	2005		A
850	PL00	X	1

Figura 2. Símbolo "Sin Mod."

Si la vista detallada muestra un círculo con un número sin apuntar a ningún componente, significa que todos los componentes mostrados tienen la modificación indicada (Figura 3). Consulte la información detallada en el índice de modificaciones.

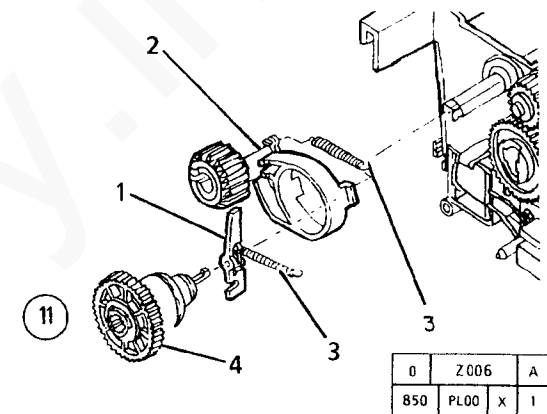


Figura 3. Símbolo de diagrama completo "Con Mod."

Si la vista detallada muestra un círculo con un número atravesado por una barra negra, sin apuntar a ningún componente, significa que los componentes mostrados tienen la configuración anterior a la modificación indicada (Figura 4).

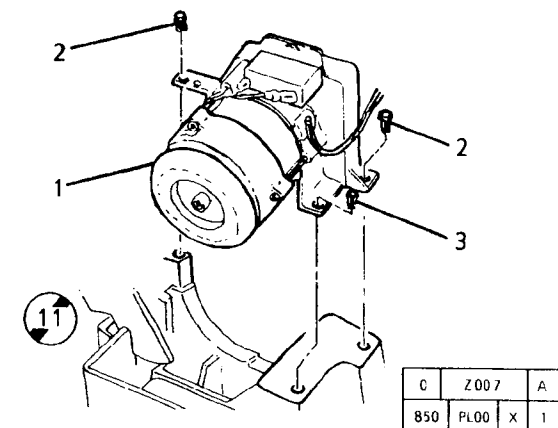
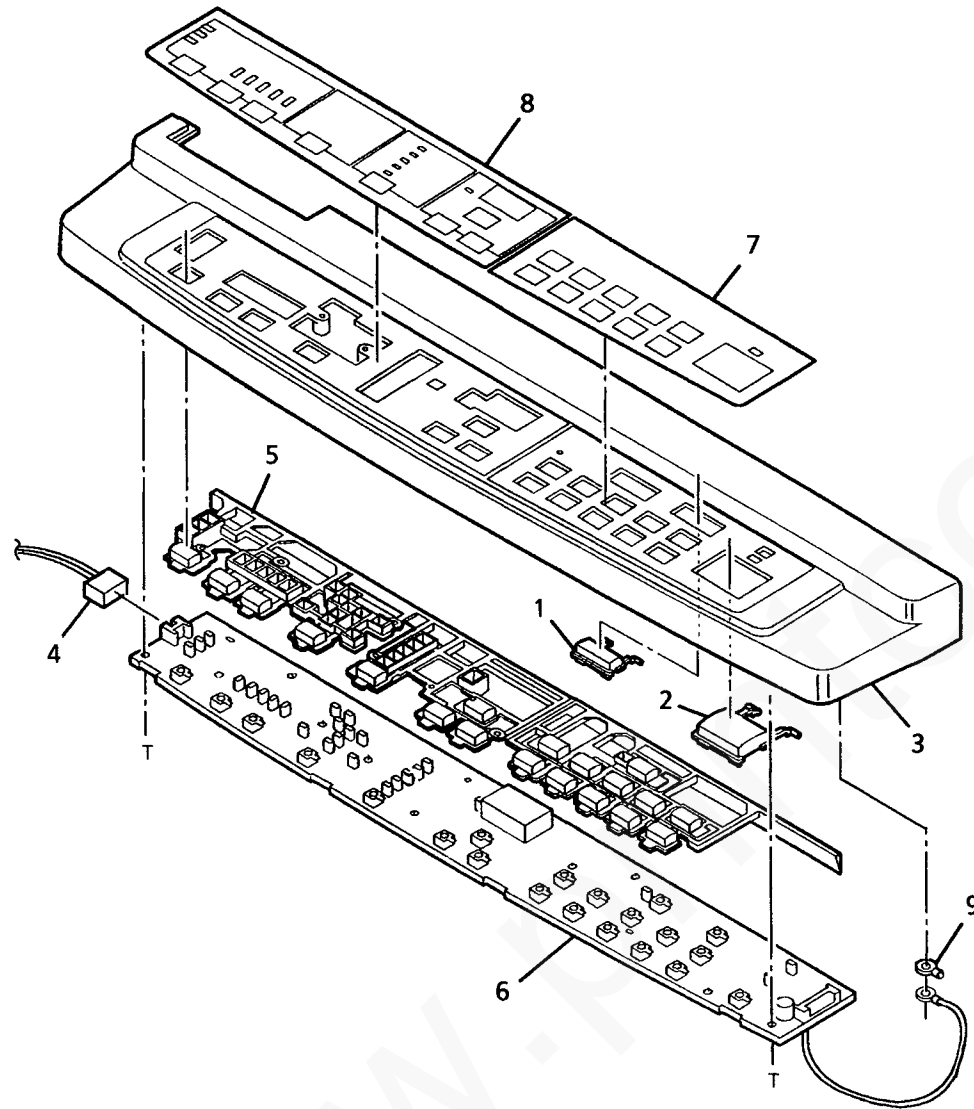


Figura 4. Símbolo de diagrama completo "Sin Mod."

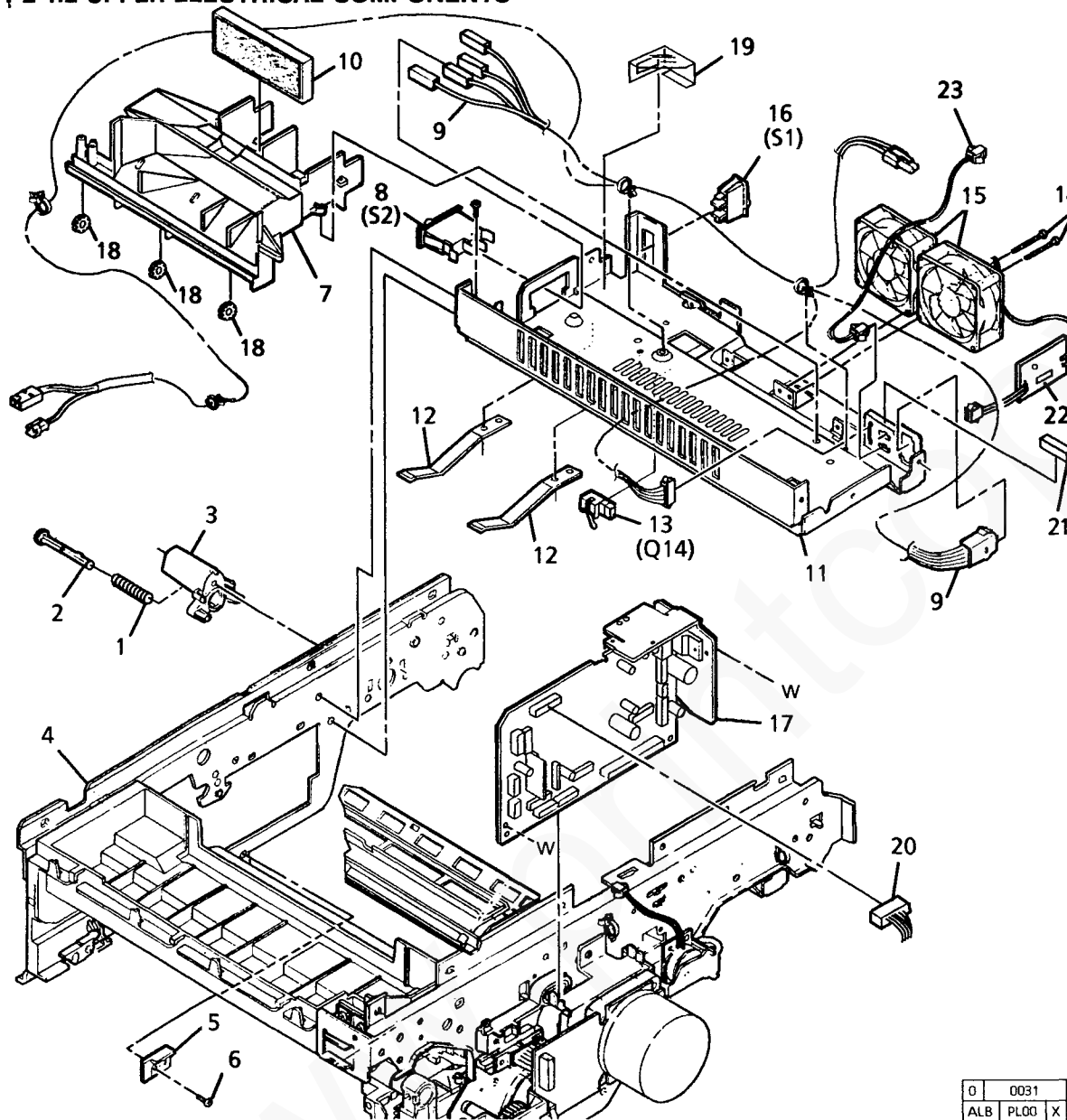
PL 1.1 CONTROL PANEL



ITEM	PART	DESCRIPTION
1	3E27250	CLEAR BUTTON
2	3E27240	START BUTTON
3	48E4350	CONTROL PANEL COVER (REP 14.1)
4	--	HARNESS (P/O MAIN HARNESS)
5	49E13800	SUPPORT (R/E,SDF) (5614)
-	49E39570	SUPPORT (1:1)(5614)
-	49E39900	SUPPORT (5113)
6	160K1640	CONTROL PANEL PWB (1:1) (REP 1.7)
-	160K8320	CONTROL PANEL PWB (R/E) (REP 1.7)
-	160K8330	CONTROL PANEL PWB (SDF) (REP 1.7)
-	160K14190	CONTROL PANEL PWB (5113)(REP 1.7)
7	96E20750	RIGHT CONTROL PANEL LABEL (5614)
-	96E26010	RIGHT CONTROL PANEL LABEL (5113)
-	96E43620	RIGHT CONTROL PANEL LABEL (5114)
8	96E52290	LEFT CONTROL PANEL LABEL (RETAIL)(120V)
-	96E67170	LEFT CONTROL PANEL LABEL (1:1)
-	96E20740	LEFT CONTROL PANEL LABEL (120V)(SDF)
-	96E25990	LEFT CONTROL PANEL LABEL (220V)(SDF)
-	96E67190	LEFT CONTROL PANEL LABEL (R/E)(120V) (5614)
-	96E67180	LEFT CONTROL PANEL LABEL (R/E)(220V) (5614)
9	15E47600	GROUND TAB

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ALB	PL00	X 0

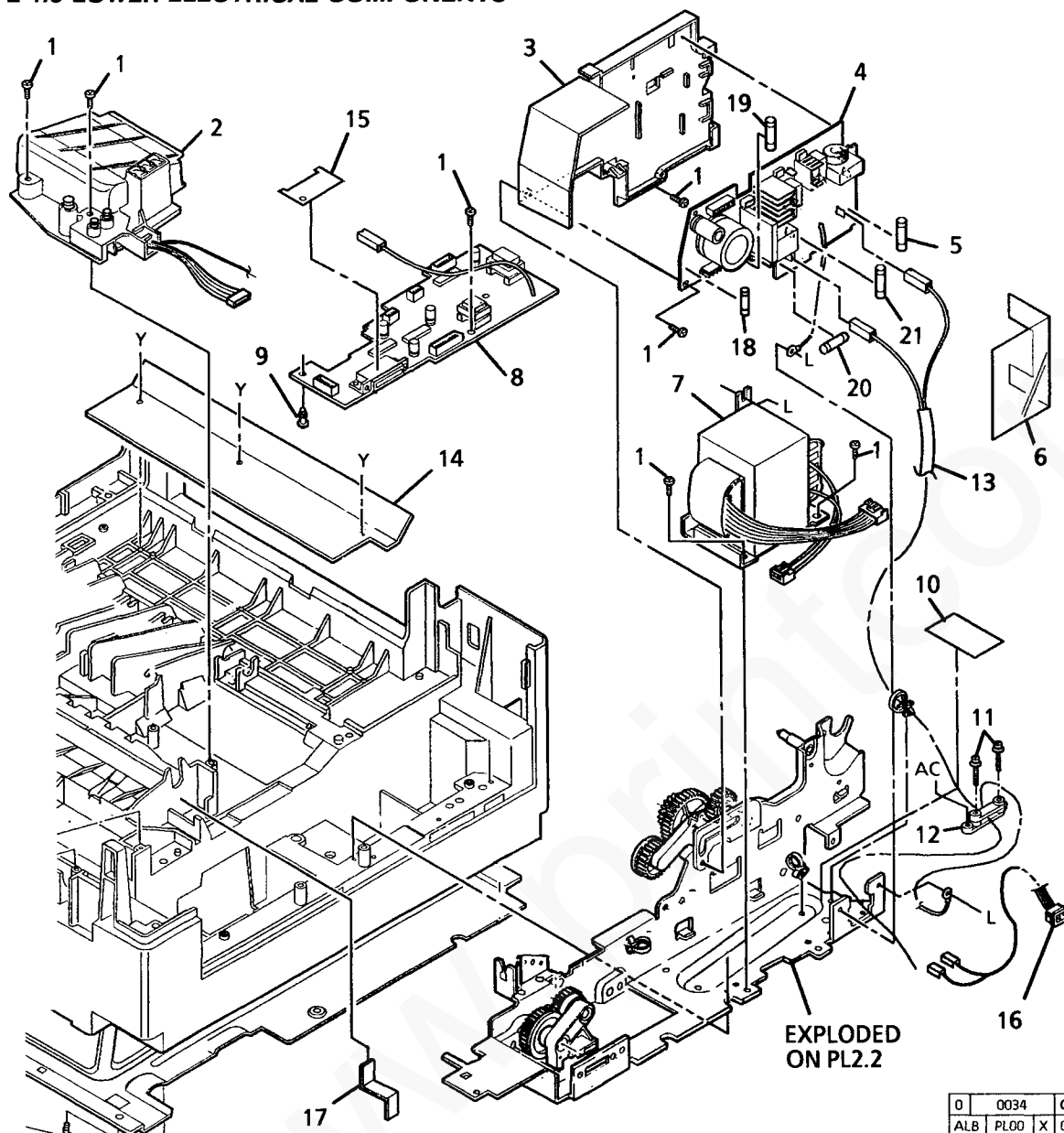
PL 1.2 UPPER ELECTRICAL COMPONENTS



ITEM	PART	DESCRIPTION
1	9E57820	INTERLOCK SPRING
2	--	INTERLOCK ACTUATOR (NOT SPARED)
3	49E13680	ACTUATOR SUPPORT
4	--	UPPER FRAME (NOT SPARED)
5	--	SUPPORT (NOT SPARED)
6	26E44020	SCREW
7	--	FAN DUCT (NOT SPARED)
8	110E6350	INTERLOCK SWITCH (S2) (REP 1.3)
-	110E2780	ALTERNATE
9	--	AC HARNESS (NOT SPARED)
10	53E4140	OZONE FILTER
11	--	INTERLOCK FRAME (NOT SPARED)
12	9E63270	FUSER PRESSURE SPRING
13	110E6370	EXIT SENSOR (Q14)
14	26E39220	SCREW (M3X30)
15	127E9120	FUSER COOLING FAN (MOT8,MOT9)
16	110E6360	MAIN POWER SWITCH (S1) (REP 1.1)
17	160K1730	MAIN PWB (USO/ALL RETAIL) (REP 1.5)
-	160K1740	MAIN PWB (XCL/RX/XLA) (REP 1.5)
18	20E23360	STAR WHEEL
19	48E16710	SWITCH COVER
20	162K11080	DC HARNESS
21	16E10340	BUSHING
22	160K13990	SLOW SPEED PWB
23	162K14130	FAN HARNESS

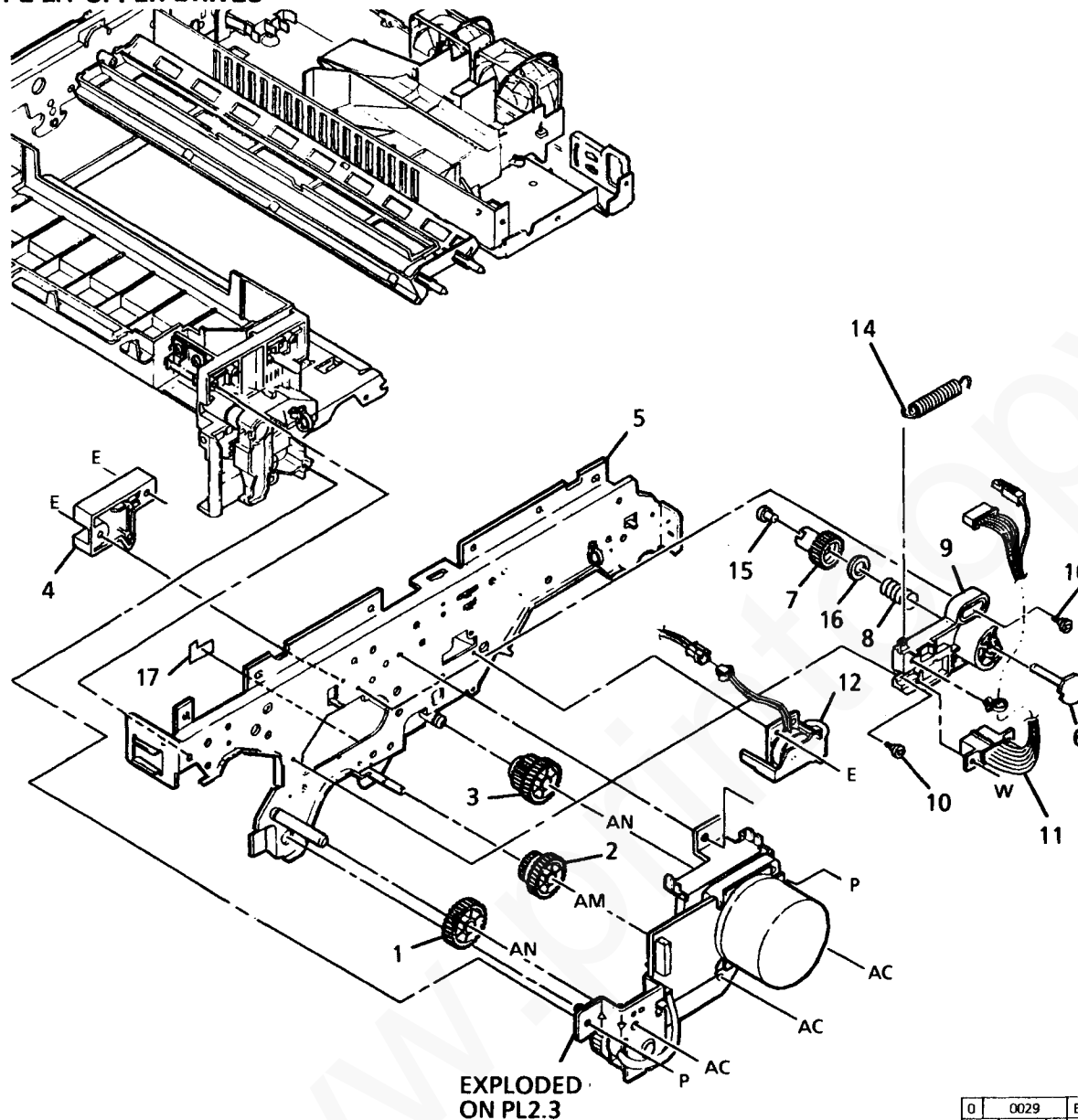
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PL 1.3 LOWER ELECTRICAL COMPONENTS



ITEM	PART	DESCRIPTION
1	26E43680	SCREW(M4X12)
2	105K10420	HVPS (REP 9.2)
3	49E13830	PWB SUPPORT
4	160K1660	INPUT POWER PWB
-	160K1670	INPUT POWER PWB
5	--	FUSE (F501/502)
6	55E28440	PLASTIC SHIELD (220V)
7	105K10360	MAIN TRANSFORMER (120V)
-	105K10400	MAIN TRANSFORMER
8	160K1650	LOWER PWB (5614)
-	160K8340	LOWER PWB (5113)
9	116E6670	STANDOFF
10	55E28430	INSULATOR
11	26E43640	SCREW (M4X20)
12	120E10560	CLAMP (120V)
13	162K11090	POWER CORD (110V)
-	117K22310	POWER CORD
14	--	FUSER BASE PLATE
15	55E31820	SHIELD
16	162K2300	HARNESS (220V)
17	19E29220	SHIELD
18	--	FUSE (F505)
19	--	FUSE (F504)
20	--	FUSE (F503)
21	--	FUSE (F501)

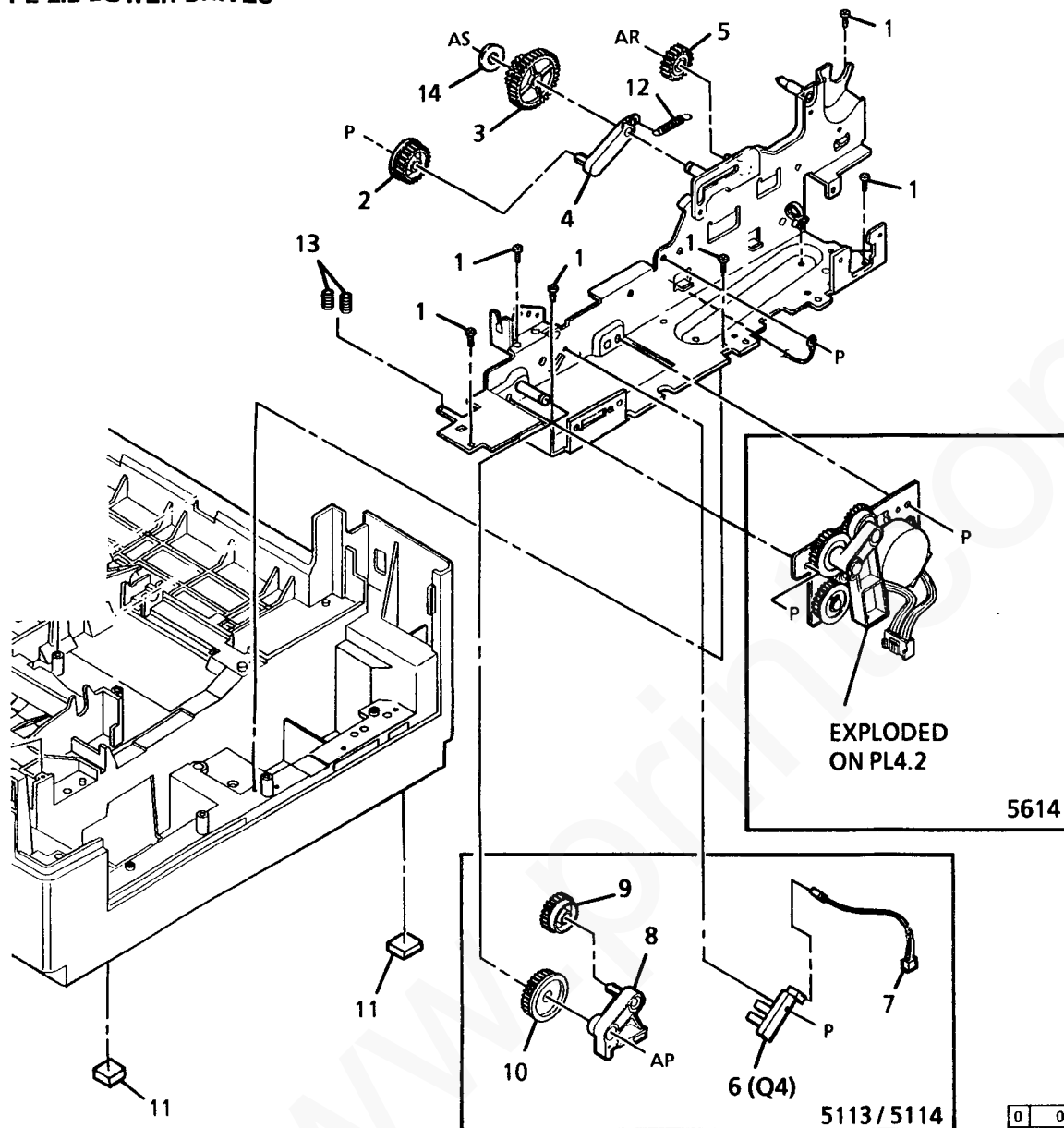
PL 2.1 UPPER DRIVES



ITEM	PART	DESCRIPTION
1	7E29630	GEAR (30T)
2	7E29710	GEAR (33/21T)
3	7E29720	GEAR (31/23T)
4	--	SUPPORT (NOT SPARED)
5	--	UPPER FRAME (REAR)(NOT SPARED)
6	6E42880	DEVELOPER DRIVE SHAFT
7	7E29730	GEAR (23T)
8	9E57860	DEVELOPER DRIVE SPRING
9	49E13750	DEVELOPER DRIVE SUPPORT
10	26E39210	SHOULDER SCREW
11	162K2070	DEVELOPER HARNESS
12	121E10170	STRIPPER FINGER
13	162K2140	SOLENOID (SOL 5)
-	162K2150	MAIN HARNESS (1:1)
-	162K2160	MAIN HARNESS (R/E)
14	9E66370	MAIN HARNESS (SDF)
15	26E46000	SPRING
16	28E10680	SCREW
17	48E17000	WASHER COVER

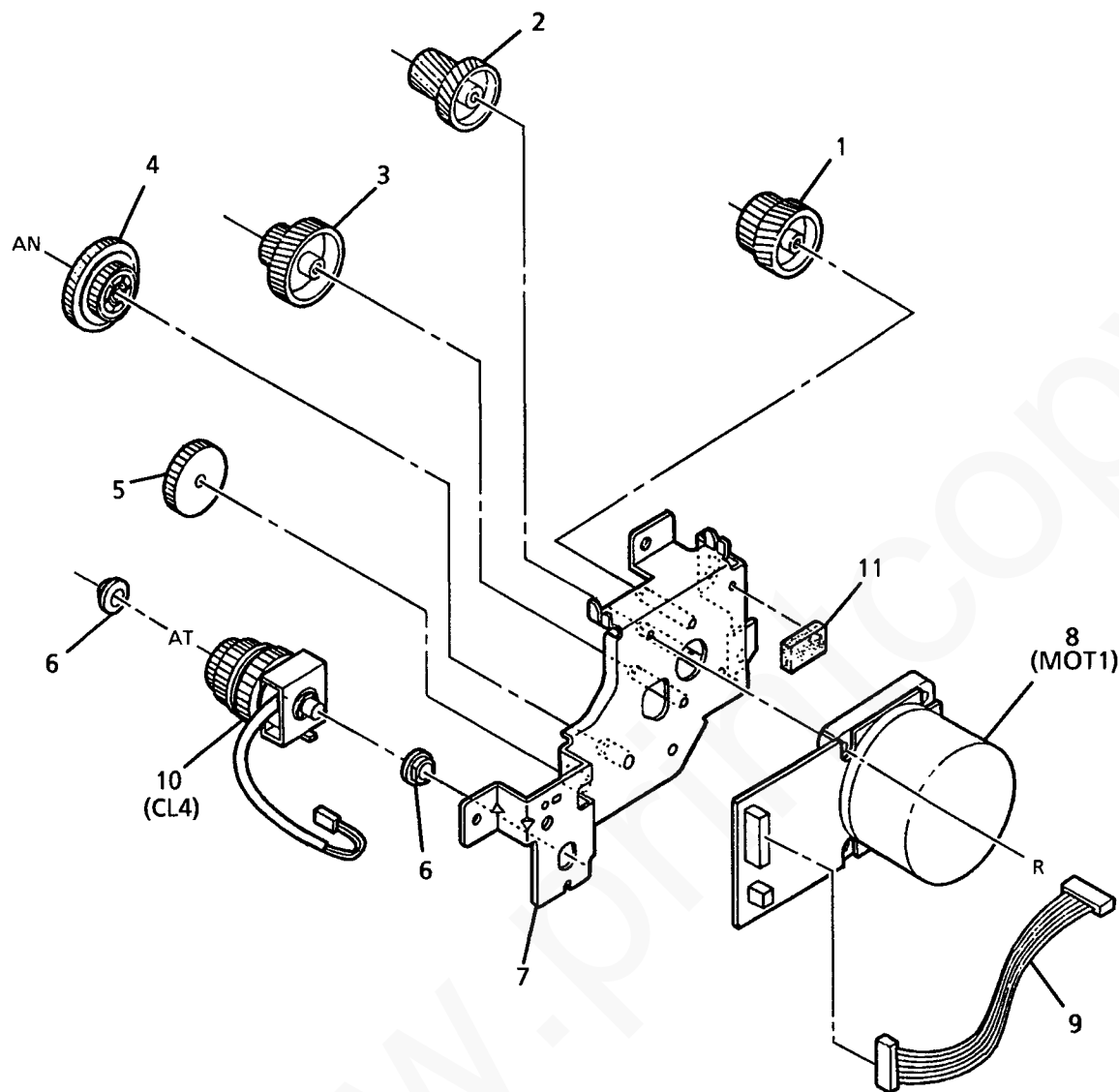
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ALB	PL00	X 0

PL 2.2 LOWER DRIVES



ITEM	PART	DESCRIPTION
1	26E43680	SCREW (M4X12)
2	7E11310	GEAR (24T)
3	7E29830	GEAR (27/42T)
4	31E6970	DRIVE PIVOT ARM
5	7E29840	GEAR (22T)
6	130E6690	TRAY 1 EMPTY
7	162K2260	HARNESS
8	31E6960	DRIVE PIVOT ARM
9	7E29790	GEAR (25T)
10	7E29810	GEAR (30T)
11	19E26890	PAD
12	9E57920	SPRING
13	9E66450	SPRING
14	28E10700	WASHER

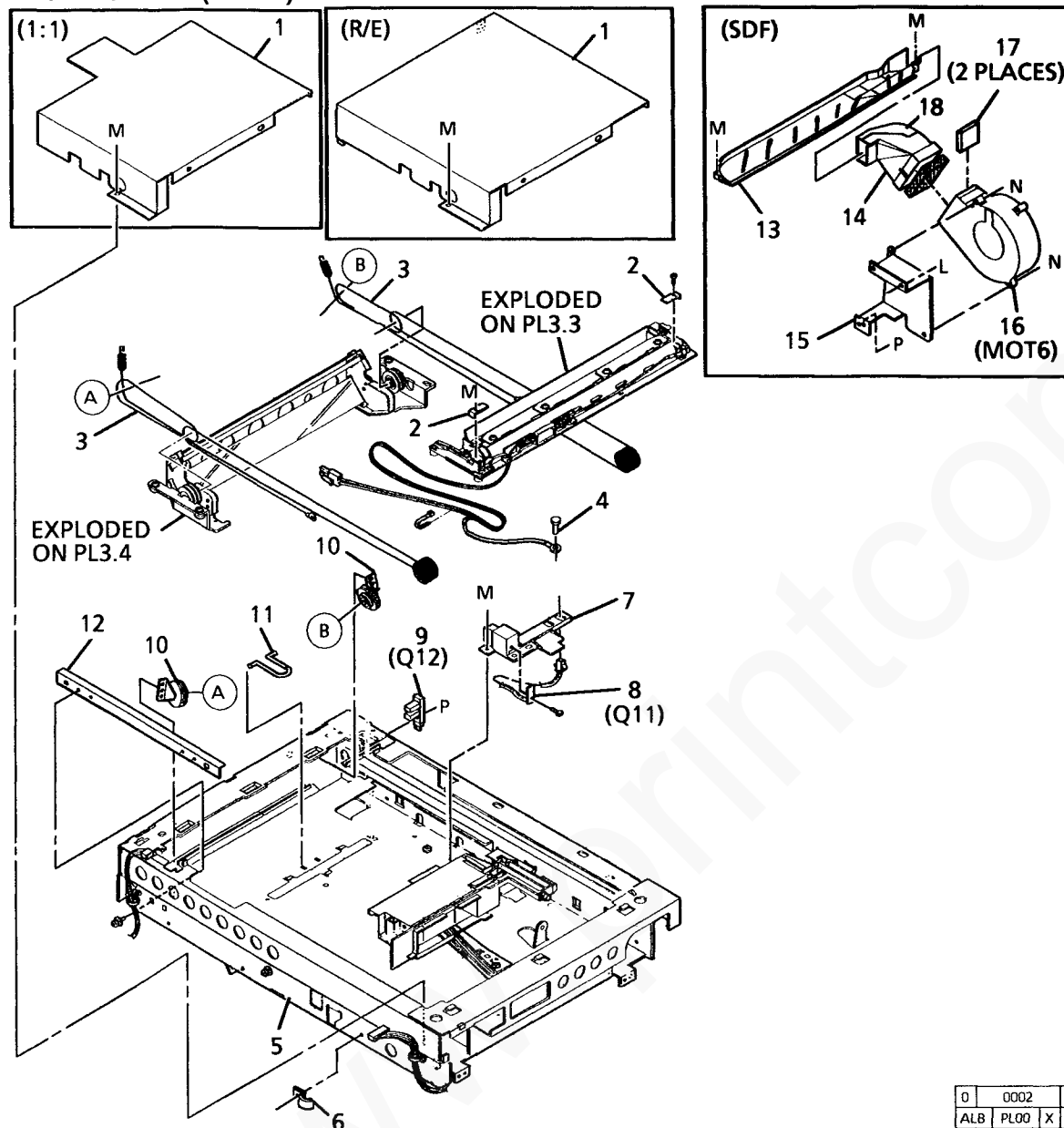
PL 2.3 MAIN DRIVE MOTOR



ITEM	PART	DESCRIPTION
1	7E29590	GEAR (35/20T)
2	7E29600	GEAR (59/24T)
3	7E29610	GEAR (68/21T)
4	7E29620	GEAR (76/23T)
5	7E29630	GEAR (30T)
6	13E9920	BEARING
7	--	MAIN DRIVE SUPPORT (NOT SPARED)
8	127K13170	MAIN DRIVE MOTOR (MOT 1) (REP 4.1)
9	--	MOTOR HARNESS (P/O MAIN HARNESS)
10	121K8790	FEED/TRANSPORT CLUTCH (CL 4)
11	19E29080	NOISE REDUCTION PAD

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ALB	PL00	X 0

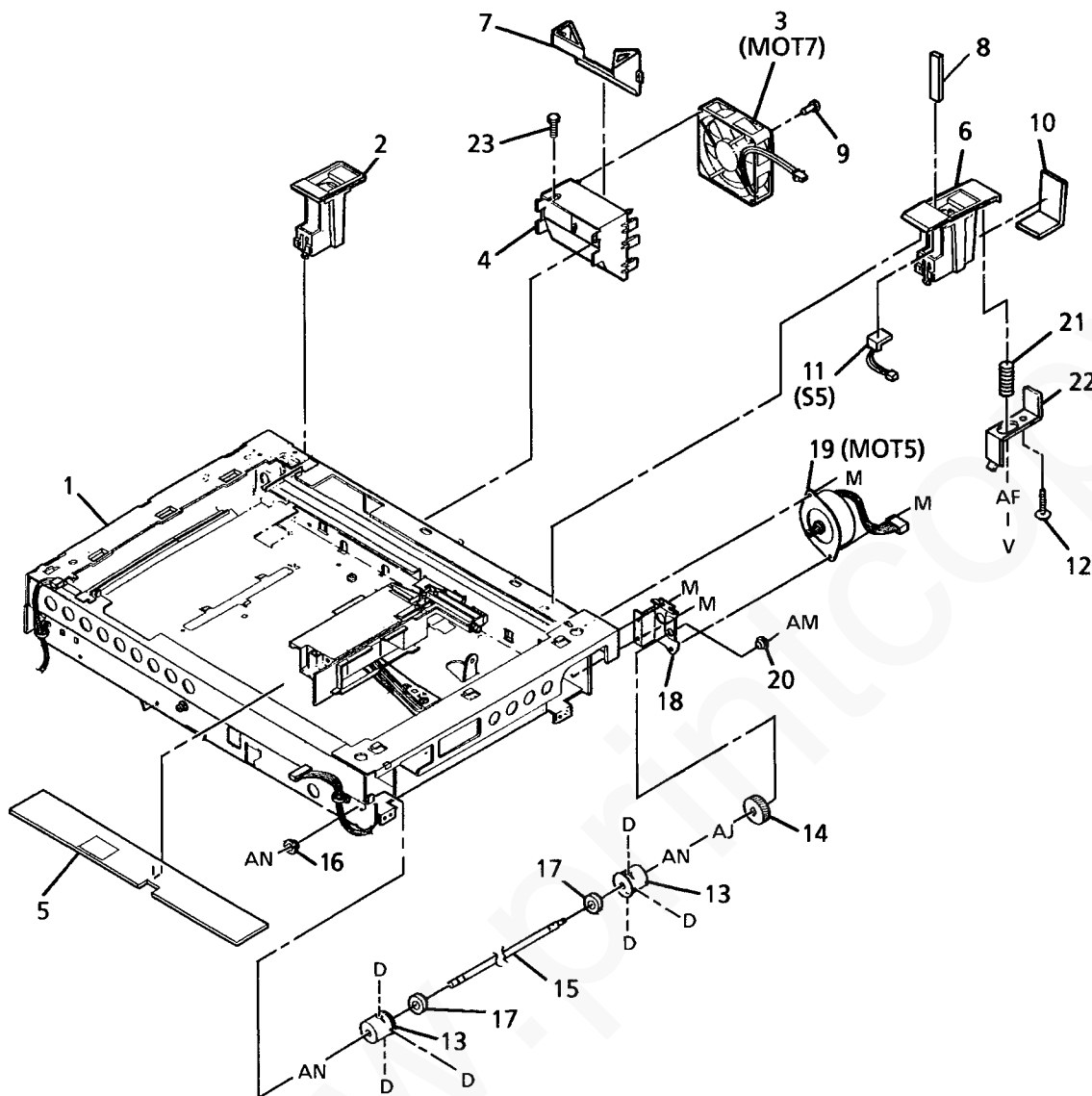
PL 3.1A OPTICS (1 OF 4)



ITEM	PART	DESCRIPTION
1	48E10980	LENS COVER (1:1)
-	48E4010	LENS COVER (R/E)
2	120E10880	CABLE CLAMP
3	12K3290	SCAN CABLE
4	26E46040	SCREW
5	--	OPTICS FRAME
6	9E67330	GROUNDING SPRING
7	49E13520	AUTO EXPOSURE SUPPORT
8	160K1570	AUTO EXPOSURE SENSOR
9	130E6650	CARRIAGE HOME SENSOR
10	6K13990	CABLE PULLEYS
11	9E66360	OZONE COVER SPRING
12	--	SCAN RAIL
13	54E4930	COOLING DUCT
14	54E4940	SDF DUCT
15	--	FAN BRACKET
16	127E9360	OPTICS COOLING FAN
17	4E8630	DUCT CUSHION
18	54E5070	DUCT JOINT

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ALB	PL00	X 0

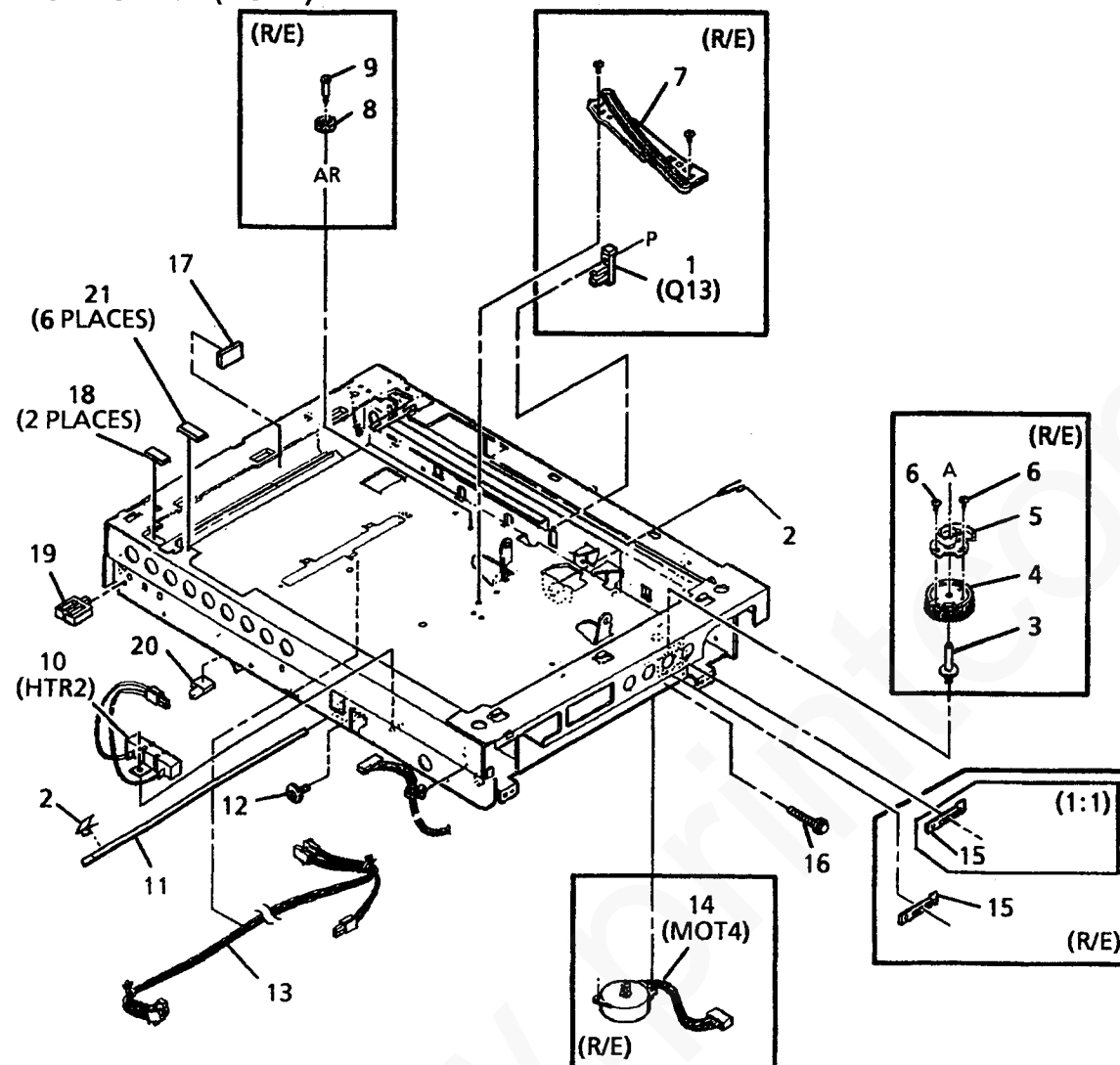
PL 3.1B OPTICS (2 OF 4)



ITEM	PART	DESCRIPTION
1	--	OPTICS FRAME (NOT SPARED)
2	49E13770	LEFT COUNTERBALANCE SUPPORT
3	127K13140	OPTICS COOLING FAN (MOT 7)
4	54E4760	FAN DUCT
5	--	INSULATOR (NOT SPARED)
6	49E13780	RIGHT COUNTERBALANCE SUPPORT
7	55E31750	DEFLECTOR
8	32E7700	GUIDE
9	26E46030	SCREW (M4X30)
10	32E7450	HINGE GUIDE
11	110E6750	DOCUMENT COVER OPEN SWITCH (S5)
12	26E46020	SCREW (SDF)
13	--	PULLEY (NOT SPARED)
14	7E29550	SCAN DRIVE GEAR
15	--	DRIVE SHAFT (NOT SPARED)
16	13E9750	BEARING (8MM)
17	5E10510	FLANGE
18	--	MOTOR BRACKET (NOT SPARED)
19	127K17150	SCAN DRIVE MOTOR (MOT 5) (REP 6.2)
20	13E9790	BEARING
21	9E66380	SPRING (SDF ONLY)
22	--	BRACKET (SDF)
23	26E54360	SCREW

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ALB	PL00	X 0

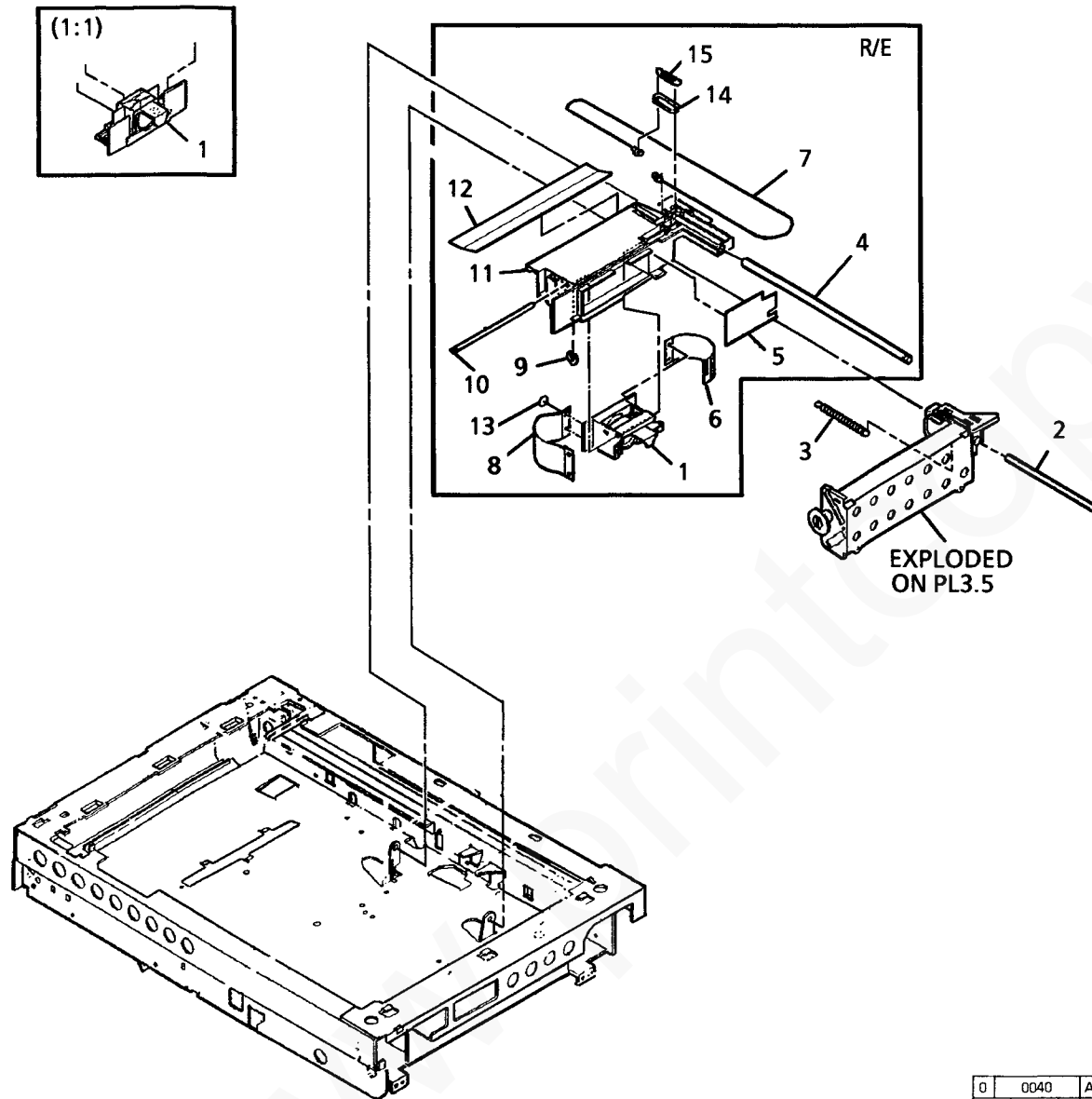
PL 3.2A OPTICS (3 OF 4)



ITEM	PART	DESCRIPTION
1	130E6690	LENS HOME SENSOR (Q13)
2	19E23730	MIRROR CLIP
3	--	LENS DRIVE SHAFT (NOT SPARED)
4	--	LENS DRIVE PULLEY (NOT SPARED)
5	--	MIRROR 4/5 CAM (NOT SPARED) (ADJ 6.6)
6	26E43990	SCREW
7	--	LENS GUIDE (NOT SPARED) (ADJ 6.11)
8	--	LENS CABLE PULLEY (NOT SPARED)
9	26E44000	SHOULDER SCREW
10	126K4770	OPTICS HEATER (110V)(HTR2) (REP 6.7)
-	126K4780	OPTICS HEATER (220V)(HTR2) (REP 6.7)
11	62E7100	MIRROR 6
12	26E39070	SCREW (RED)
13	162K2030	OPTICS HARNESS (120V)
-	162K7770	OPTICS HARNESS (220/240V)
14	127K13150	LENS DRIVE MOTOR (MOT 4) (REP 6.4)
15	49E13440	LENS/MIRROR POSITION BRACKET
16	26E46010	SCREW (M4X40) (1:1 ONLY)(ADJ 6.15)
17	4E8670	CUSHION
18	19E29390	PAD (SDF ONLY)
19	120E10890	WIRE CLAMP
20	120E10900	WIRE CLAMP
21	19E29380	PAD (6 PLACES)

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ALB	PL00	X 0

PL 3.2B OPTICS (4 OF 4)

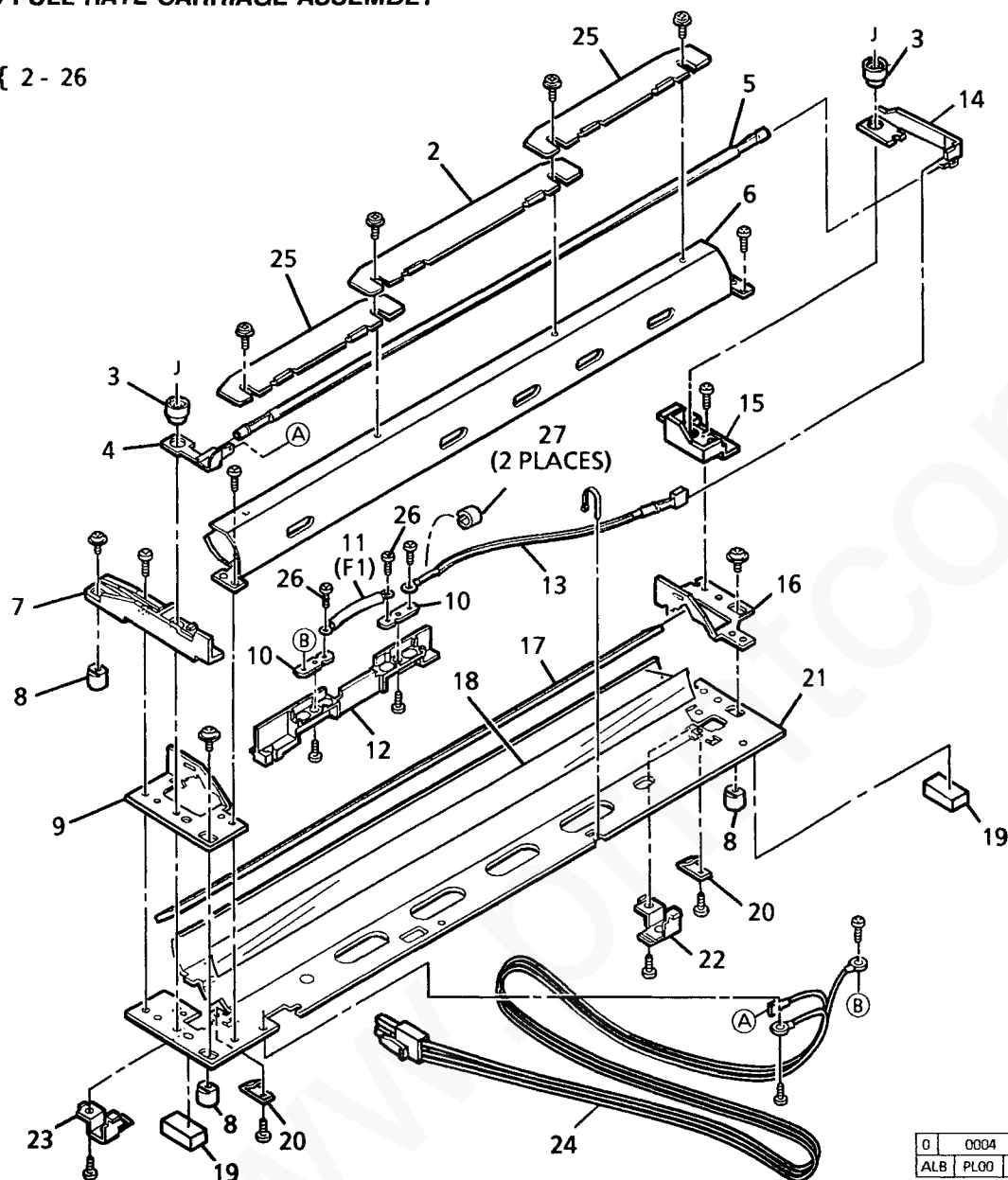


ITEM	PART	DESCRIPTION
1	--	LENS (1:1) (NOT SPARED) (ADJ 6.14)
2	--	MIRROR 4/5 SHAFT (NOT SPARED)
3	9E58200	MIRROR RETURN SPRING
4	--	LENS SUPPORT SHAFT (NOT SPARED)
5	55E31890	LIGHT SHIELD
6	55E28370	LIGHT SHIELD
7	12E6960	LENS CABLE (REP 6.8, ADJ 6.16)
8	55E28380	FRONT LIGHT SHIELD
9	19E26710	PLASTIC CLIP
10	--	LENS SHAFT (NOT SPARED)
11	--	LENS CARRIAGE (R/E) (NOT SPARED)
12	55E31880	LIGHT SHIELD
13	55E31290	LIGHT SHIELD
14	19E29570	CLIP
15	9E57670	LENS CABLE SPRING

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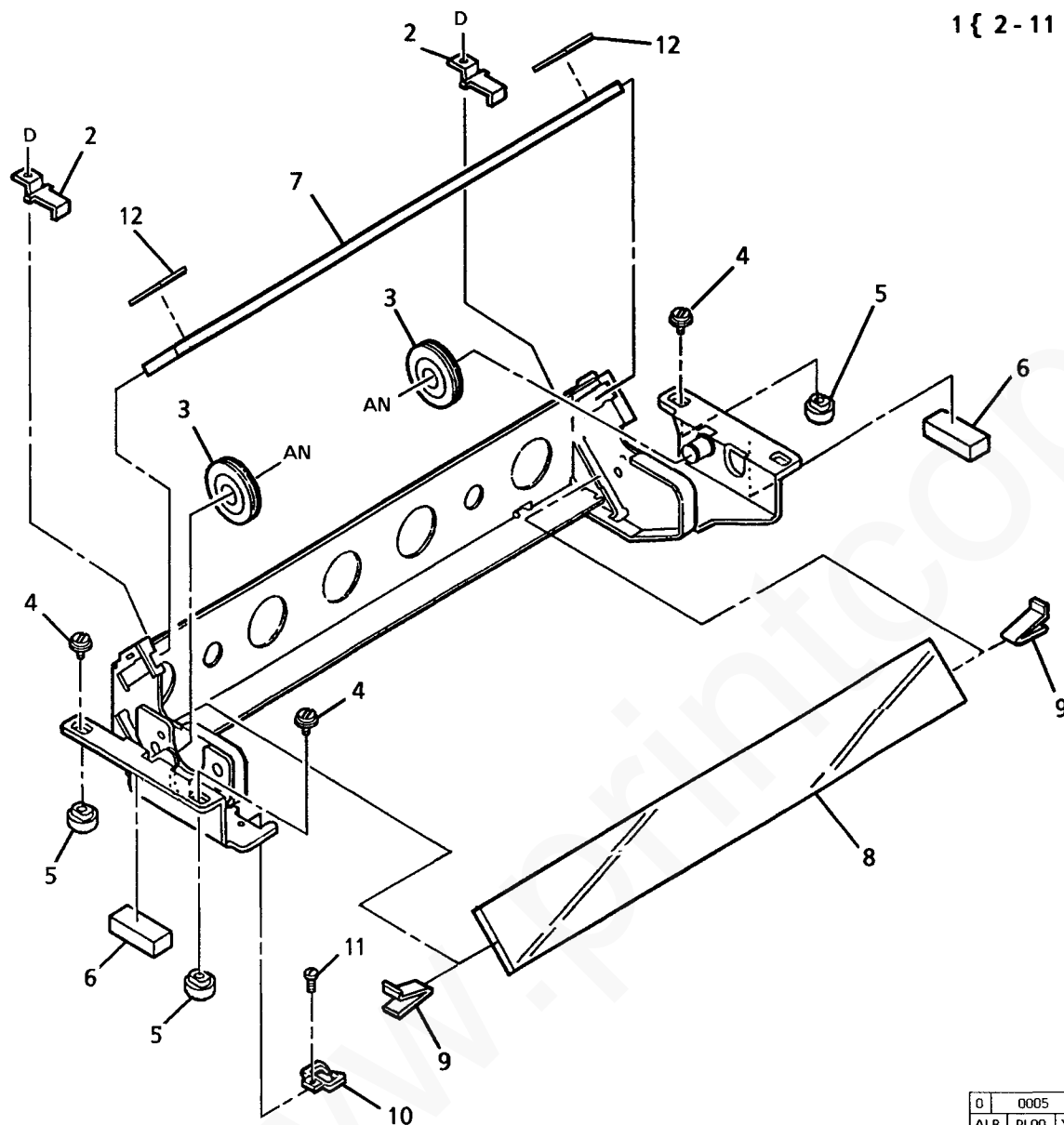
PL 3.3 FULL RATE CARRIAGE ASSEMBLY

1 { 2 - 26



ITEM	PART	DESCRIPTION
1	41K4540	FULL RATE CARRIAGE ASSEMBLY (120V) (ADJ 6.7)
-	41K4550	FULL RATE CARRIAGE ASSEMBLY (220/240V) (ADJ 6.7)
2	--	EXPOSURE LAMP BAFFLE (P/O ITEM 1)(ADJ 6.13)
3	--	CONTACT RETAINER (P/O ITEM 1)
4	--	CONTACT (P/O ITEM 1)
5	122E1810	EXPOSURE LAMP (120V) (REP 6.3)
-	122E1820	EXPOSURE LAMP (220/240V) (REP 6.3)
6	--	REFLECTOR (P/O ITEM 1)
7	--	SUPPORT (P/O ITEM 1)
8	3E27170	SLIDE BUTTON
9	--	FRONT BRACKET (P/O ITEM 1)
10	--	TERMINAL (P/O ITEM 1)
11	108E3110	EXPOSURE LAMP OVERTEMPERATURE FUSE (F1)(REP 6.6)
12	--	FUSE SHIELD (P/O ITEM 1)
13	--	WIRE (P/O ITEM 1)
14	--	CONTACT (REAR) (P/O ITEM 1)
15	--	SUPPORT (P/O ITEM 1)
16	--	REAR BRACKET (P/O ITEM 1)
17	62E7170	MIRROR 1
18	--	REFLECTOR (P/O ITEM 1)
19	4E8620	FOAM PAD
20	19E26900	MIRROR CLIP
21	--	CARRIAGE FRAME (P/O ITEM 1)
22	--	REAR CABLE CLAMP (P/O ITEM 1)
23	--	FRONT CABLE CLAMP (P/O ITEM 1)
24	162K2040	LAMP HARNESS
25	--	OUTER LAMP BAFFLE (P/O ITEM 1)(ADJ 6.13)
26	26E43670	SCREW (M3, BRASS)
27	600K56760	FUSE SAFETY COVER KIT (10/KIT)

PL 3.4 HALF RATE CARRIAGE ASSEMBLY



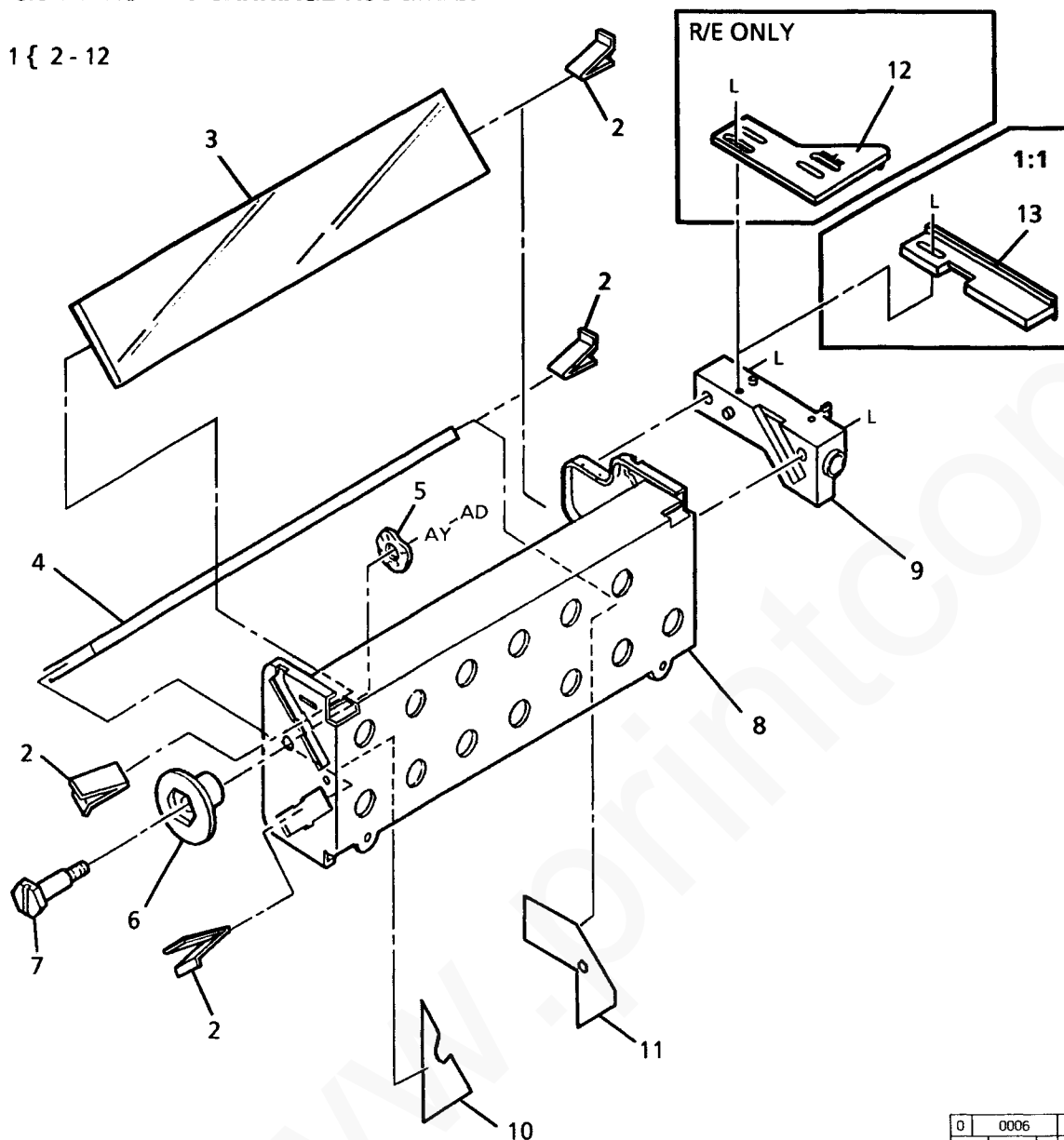
1 { 2 - 11

ITEM	PART	DESCRIPTION
1	30K52780	HALF RATE CARRIAGE ASSEMBLY (ADJ 6.7)
2	19E26700	MIRROR CLIP
3	--	CABLE PULLEY (P/O ITEM 1)
4	26E43660	SCREW (M3)
5	3E27170	BUTTON
6	4E8450	FOAM PAD
7	62E7110	MIRROR 2
8	62E7120	MIRROR 3
9	19E23730	MIRROR CLIP
10	32E7460	GUIDE
11	113W27651	SCREW
12	28E10840	SPACER

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PL 3.5 MIRROR 4/5 CARRIAGE ASSEMBLY

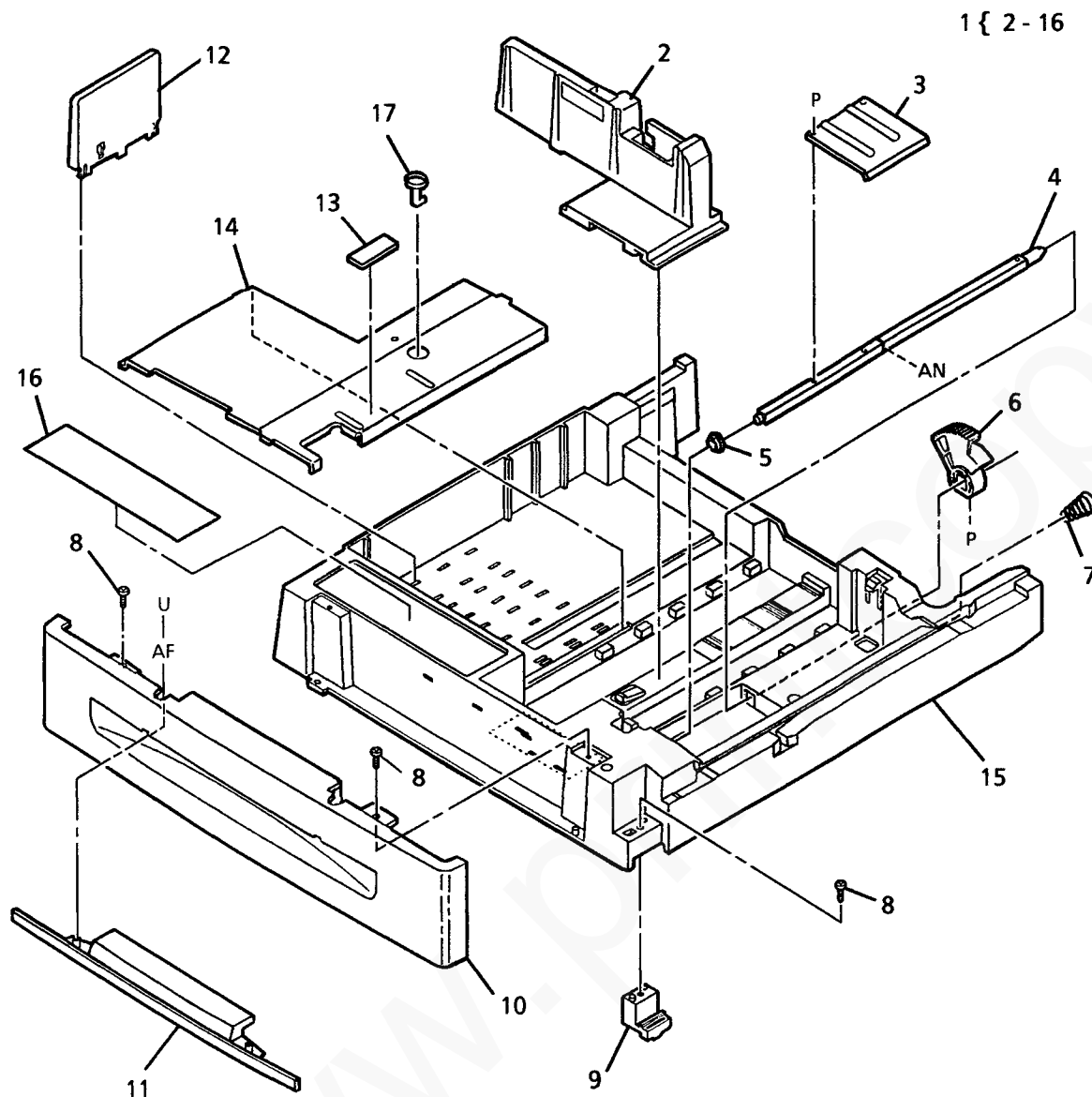
1 { 2 - 12



ITEM	PART	DESCRIPTION
1	30K52790	MIRROR 4/5 CARRIAGE ASSEMBLY (1:1) (ADJ 6.10)
-	30K52800	MIRROR 4/5 CARRIAGE ASSEMBLY (R/E)
2	19E23730	MIRROR CLIP
3	62E7150	MIRROR 4 (R/E)
-	--	MIRROR 4 (1:1)
4	62E7140	MIRROR 5
5	--	WASHER (P/O ITEM 1)
6	--	MIRROR POSITION CAM (P/O ITEM 1)(ADJ 6.10)
7	--	SCREW (P/O ITEM 1)
8	--	CARRIAGE (P/O ITEM 1)
9	--	MIRROR SUPPORT (P/O ITEM 1)
10	--	LIGHT SHIELD (P/O ITEM 1)
11	--	LIGHT SHIELD (P/O ITEM 1)
12	15E40530	MIRROR POSITION BRACKET (ADJ 6.12)
13	3E34280	STOPPER (1:1) (ADJ 6.15)

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PL 4.1 TRAY 1 ASSEMBLY (500 SHEET)

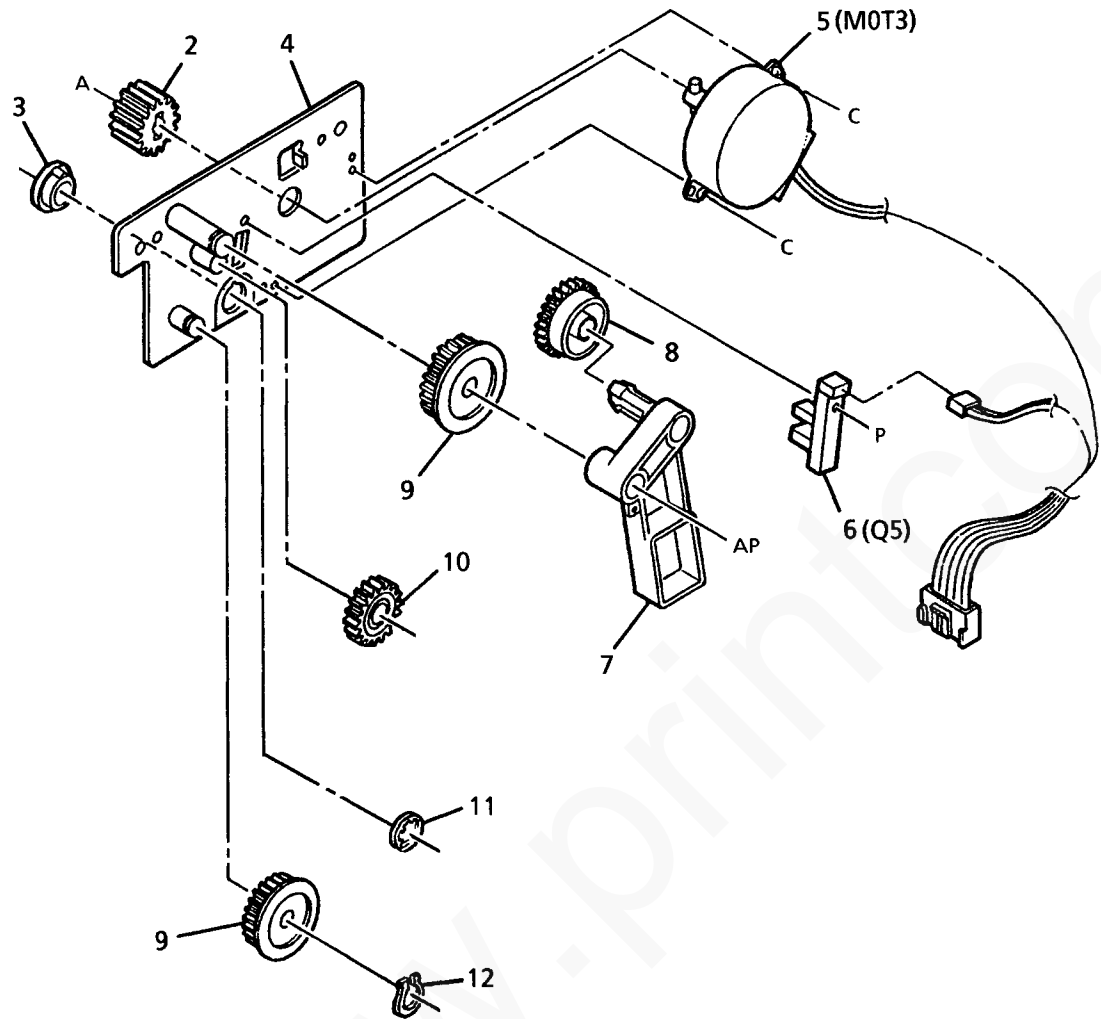


ITEM	PART	DESCRIPTION
1	50K21160	TRAY 1 ASSEMBLY (500 SHEET)
2	38E14180	REAR GUIDE
3	--	LIFT PLATE (P/O ITEM 1)
4	6E45820	LIFT SHAFT
5	13E10120	BEARING
6	7E33880	LIFT GEAR
7	9E67170	TRAY ASSIST SPRING
8	26E43680	SCREW (M4X12)
9	3E27150	PAPER TRAY REGISTRATION BLOCK (ADJ 8.4)
10	48E10970	TRAY 1 FRONT COVER
11	3E32930	HANDLE
12	38E14190	LEFT PAPER GUIDE
13	19E27520	RETARD PAD
14	15E44330	LIFT PLATE
15	--	FRAME (P/O ITEM 1)
16	--	LABEL (P/O ITEM 1)
17	120E10520	SHIPPING RETAINER

0	0007	8
ALB	PL00	X 0

PL 4.2 TRAY 1 LIFT ASSEMBLY

1 { 2 - 12



ITEM	PART	DESCRIPTION
1	127K14220	TRAY 1 LIFT ASSEMBLY (REP 7.5)
2	7E34040	LIFT GEAR
3	--	BEARING (P/O ITEM 1)
4	--	SUPPORT BRACKET (P/O ITEM 1)
5	127E9390	TRAY 1 LIFT MOTOR (MOT 3)
6	130E6690	TRAY 1 POSITION SENSOR (Q5)
7	31E7300	TRAY 2 DRIVE ARM
8	7E29790	GEAR
9	--	GEAR (P/O ITEM 1)
10	7E34060	GEAR (20T)
11	--	RETAINER (P/O ITEM 1)
12	--	GRIP RING (P/O ITEM 1)

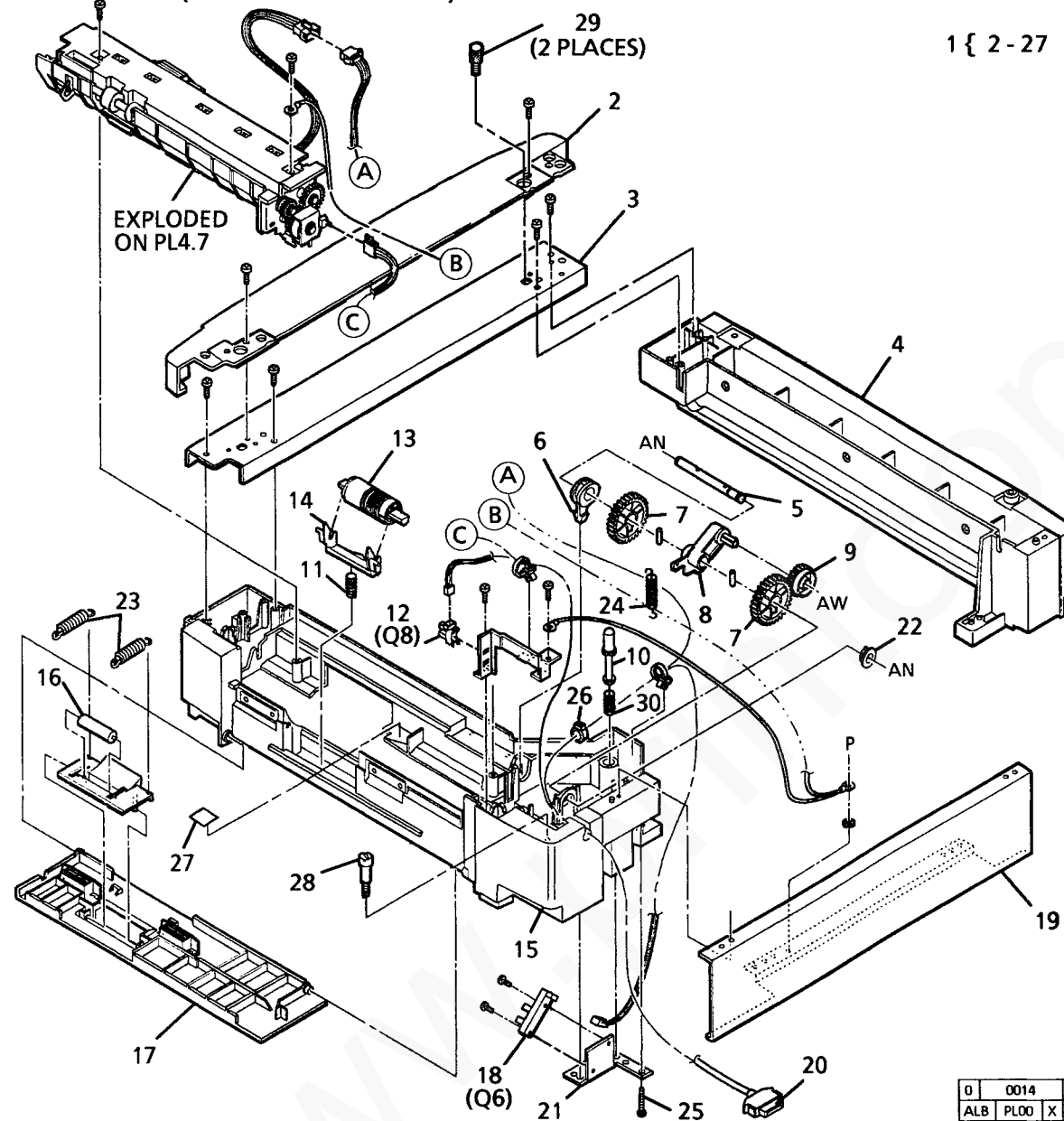
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5614/5113/5114



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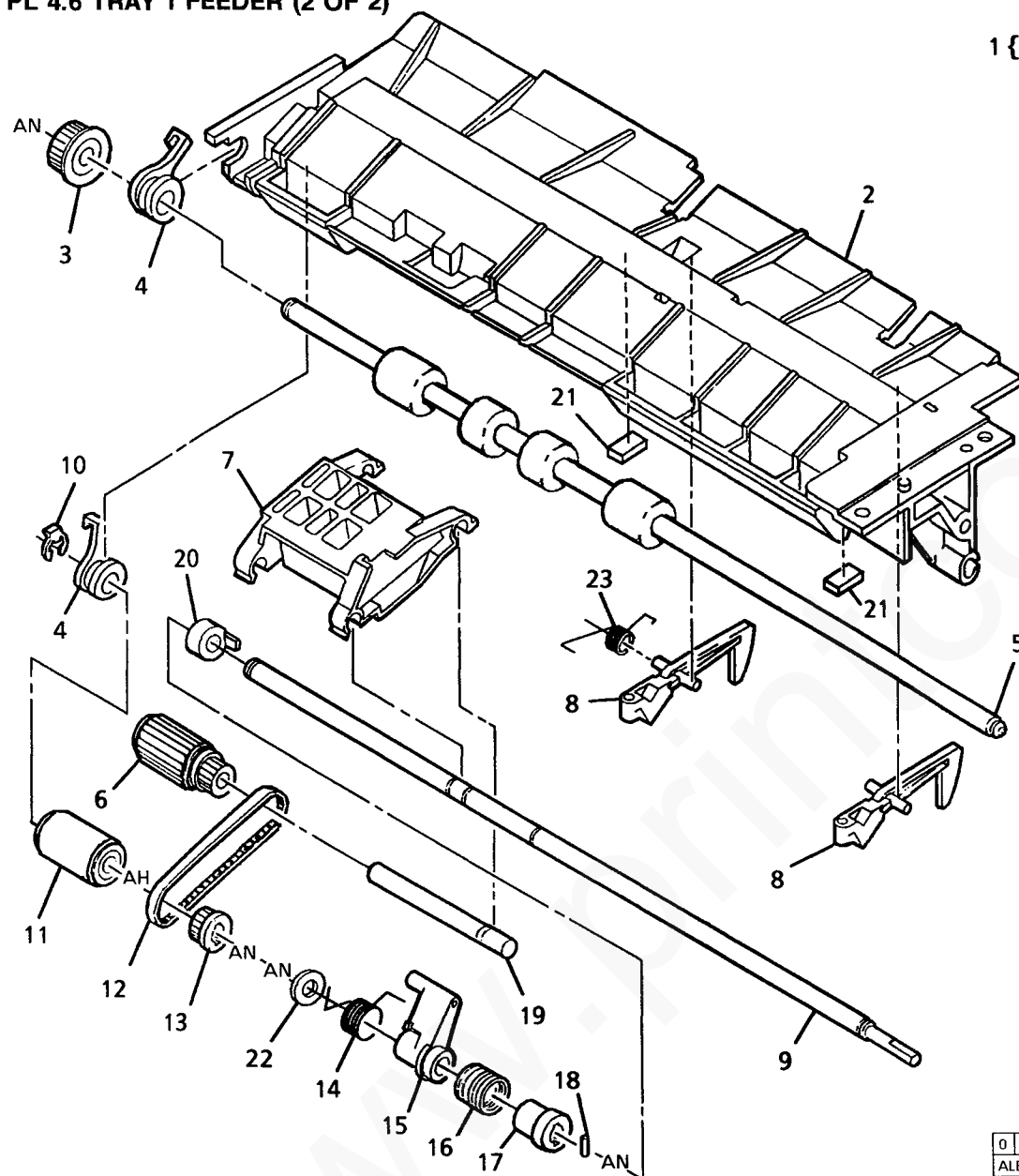
PL 4.4 TRAY 2 (OPTIONAL CASSETTE)



ITEM	PART	DESCRIPTION
1	--	TRAY 2 ASSEMBLY KIT (FOR KIT, CONTACT SALES REP.) (REP 7.3)
2	48E12020	FRONT COVER
3	--	FRONT FRAME (P/O ITEM 1)
4	--	LEFT FRAME (P/O ITEM 1)
5	--	IDLER SHAFT (P/O ITEM 1)
6	13E9740	BEARING
7	7E34120	GEAR (33T)
8	31E7290	IDLER ARM
9	7E29790	GEAR (25T)
10	120E10320	ACTUATOR
11	9E70250	SPRING
12	107E7470	TRANSPORT OPEN SENSOR (Q8)
13	22K45150	RETARD ROLLER (REP 7.7)
14	49E13820	SUPPORT
15	--	RIGHT FRAME (P/O ITEM 1)
16	22E15300	PINCH ROLLER
17	48E12030	TRAY 2 TRANSPORT COVER
18	130E6690	TRAY 2 EMPTY SENSOR (Q6)
19	--	REAR FRAME (P/O ITEM 1)
20	162K8320	TRAY 2 HARNESS
21	49E35800	SENSOR BRACKET
22	--	BEARING (P/O ITEM 1)
23	9E63710	PINCH ROLL SPRING
24	9E63720	SPRING
25	26E44330	SCREW (M4X16)
26	121E10910	EME SHIELD
27	19E26830	PAD
28	26E46130	DOCKING SCREW
29	26E46110	DOCKING SCREW (2)
30	9E66510	SPRING

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ALB	PLOO	X 0

PL 4.6 TRAY 1 FEEDER (2 OF 2)

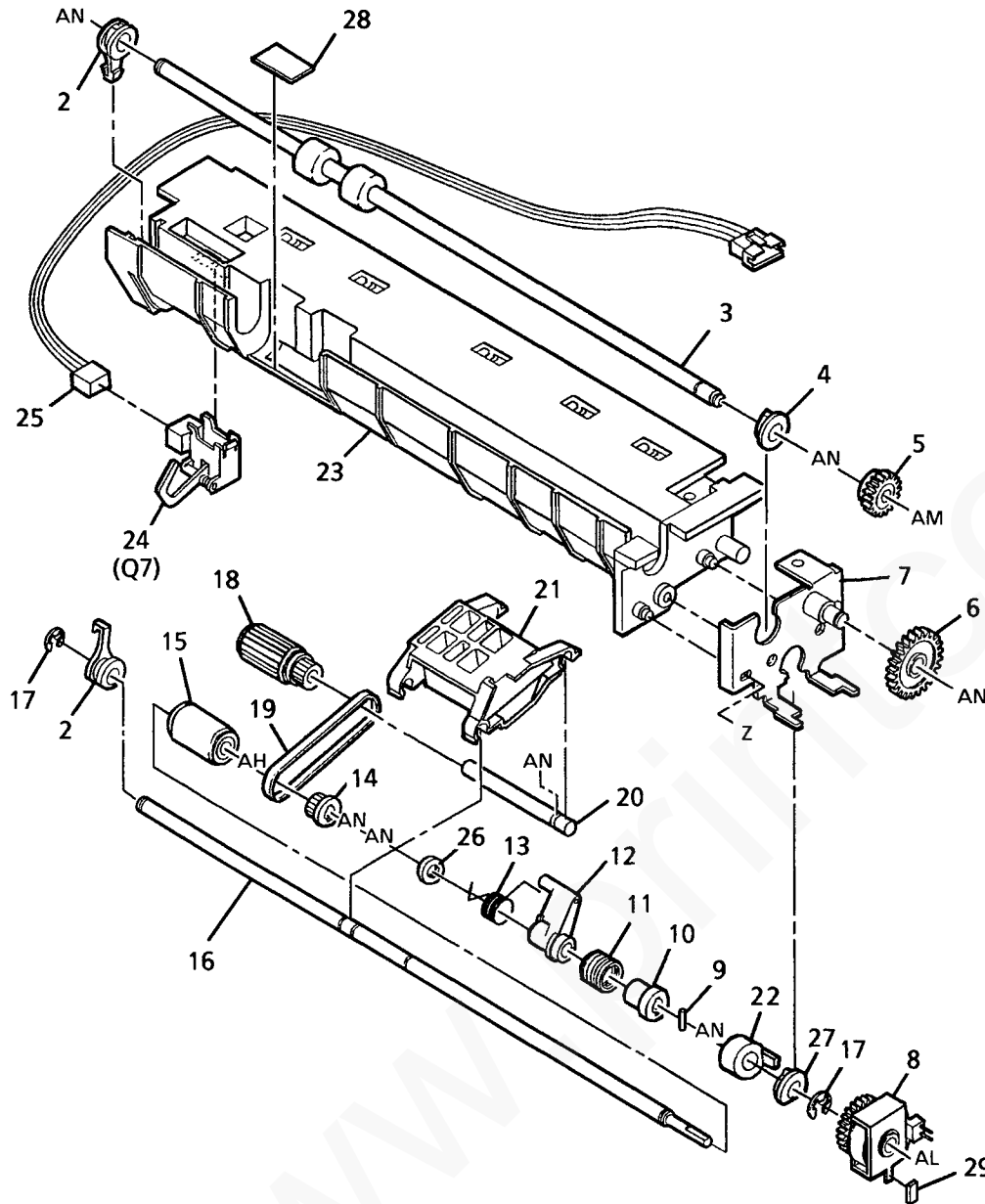


1 { 2-23

ITEM	PART	DESCRIPTION
1	--	TRAY 1 FEED ASSEMBLY/TRANSPORT (P/O ITEM 1, PL4.5) (REP 7.1)
2	--	FRAME (P/O ITEM 1)
3	20E20700	PULLEY
4	13E9740	BEARING
5	22E15360	TRANSPORT ROLLER
6	22E15380	NUDGER ROLLER
7	49E13850	FEED SUPPORT (250 SHEET)
-	49E42940	FEED SUPPORT (500 SHEET)
8	120E8430	ACTUATOR
9	--	FEEDER DRIVE SHAFT (P/O ITEM 1)
10	19E26710	PLASTIC CLIP
11	22E15370	FEED ROLLER (W/O TAG 1)
-	22E18280	FEED ROLLER (W/TAG 1)
12	23E11540	BELT (80T) (250 SHEET)
-	23E13460	BELT (500 SHEET)
13	20E20710	PULLEY (22T)
14	9E57960	RETRACT SPRING (250 SHEET)(W/O TAG 1) (REP 7.6)
-	9E69860	RETRACT SPRING (250 SHEET)(W/TAG 1) (REP 7.6)
-	9E69610	RETRACT SPRING (500 SHEET) (REP 7.6)
15	31E6990	ROLLER RELEASE ARM
16	9E69870	WRAP SPRING
17	5E9610	COLLAR
18	29E19270	DOWEL PIN (2X12)
19	6E51530	ROLLER SHAFT (250 SHEET) (W/TAG 1,44)
-	6E51860	ROLLER SHAFT (500 SHEET) (W/TAG 1,45)
20	38E15480	GUIDE
21	4E8560	FOAM PAD
22	28E10670	WASHER
23	9E66730	ACTUATOR SPRING

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ALB	PL00	X 0

PL 4.7 TRAY 2 FEEDER

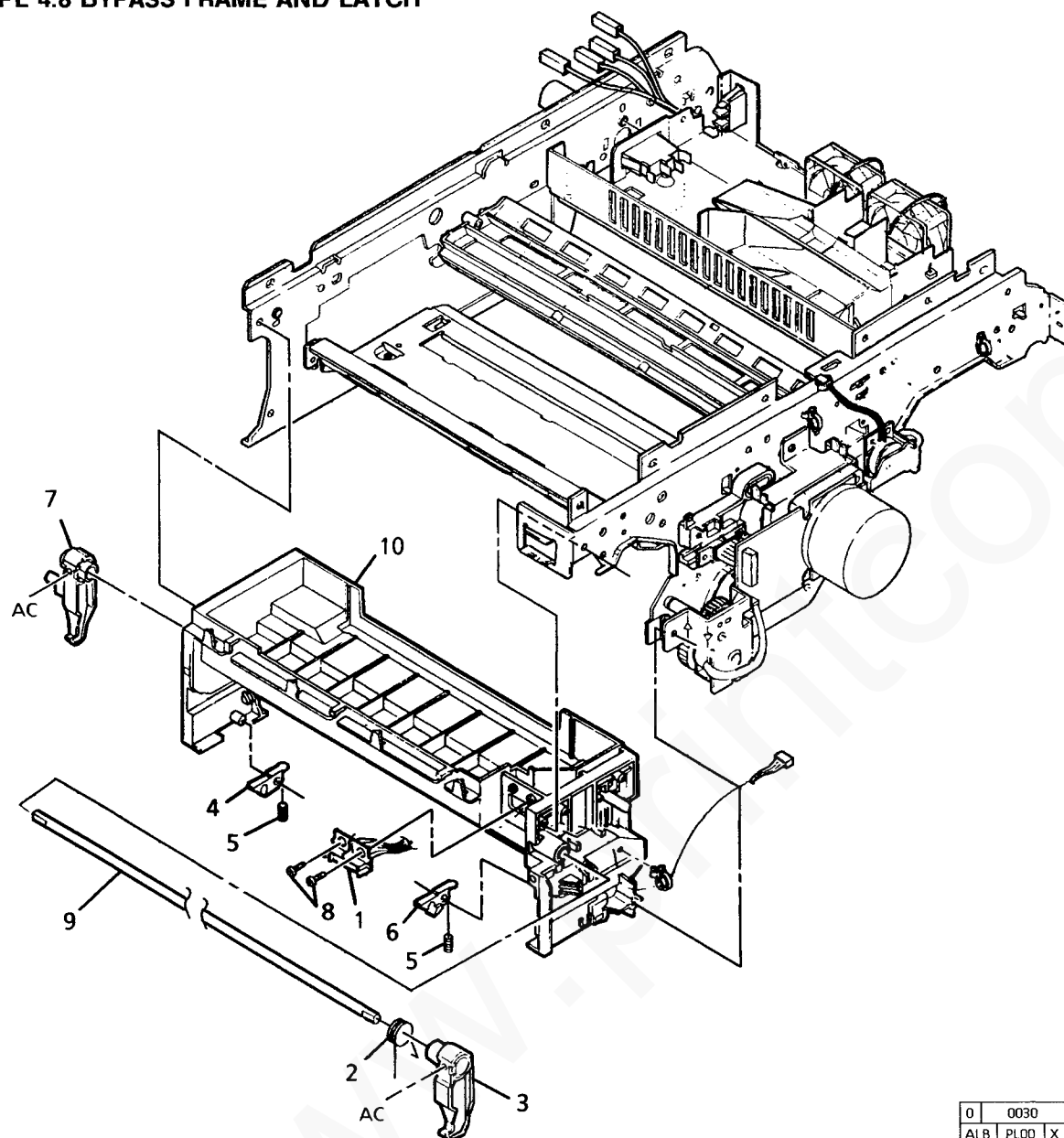


1 { 2 - 29

ITEM	PART	DESCRIPTION
1	22K40710	TRAY 2 FEEDER ASSEMBLY (REP 7.4)
2	13E9740	BEARING
3	22E15890	TRAY 2 TAKEAWAY ROLL
4	13E9750	BEARING
5	7E29880	GEAR (19T)
6	7E29870	GEAR (24T)
7	--	DRIVE SUPPORT (P/O ITEM 1)
8	121K8780	TRAY 2 FEED CLUTCH (CL3)
9	29E19270	DOWEL PIN (2X12)
10	5E9610	COLLAR
11	9E69870	WRAP SPRING
12	31E6990	ROLLER RETRACT ARM
13	9E69860	RETRACT SPRING (REP 7.6)
14	20E20710	PULLEY (22T)
15	22E18280	FEED ROLLER
16	--	FEEDER DRIVE SHAFT (P/O ITEM 1)
17	19E26710	PLASTIC CLIP
18	22E15380	NUDGER ROLL
19	23E11540	DRIVE BELT
20	6E51530	ROLLER SHAFT
21	49E13850	FEED SUPPORT
22	38E15480	GUIDE
23	--	FRAME (P/O ITEM 1)
24	130E7000	TRAY 2 JAM SENSOR (Q7)
25	162K8310	HARNESS
26	28E10670	WASHER
27	13E10120	BEARING
28	19E29400	PAD
29	19E29410	PAD

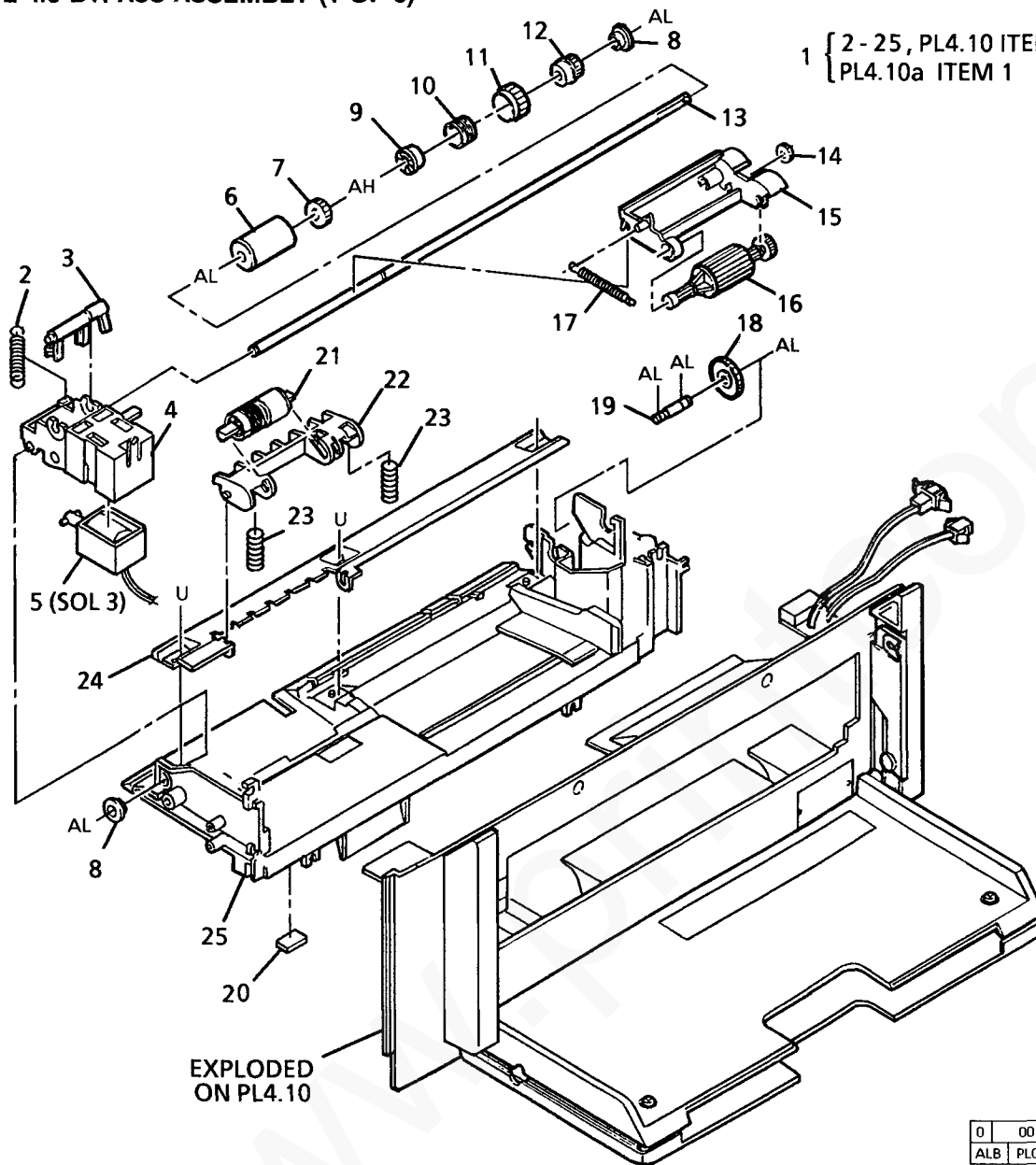
PL 4.8 BYPASS FRAME AND LATCH

ITEM	PART	DESCRIPTION
1	162K2050	BYPASS HARNESS
2	9E57850	LATCH SPRING
3	3E27230	REAR COPIER LATCH
4	3E27220	FRONT BYPASS LATCH
5	9E57840	LATCH SPRING
6	3E32940	REAR BYPASS LATCH
7	3E27210	FRONT COPIER LATCH
8	26E44300	SCREW
9	6E42870	LATCH SHAFT
10	--	BYPASS SUPPORT (NOT SPARED)



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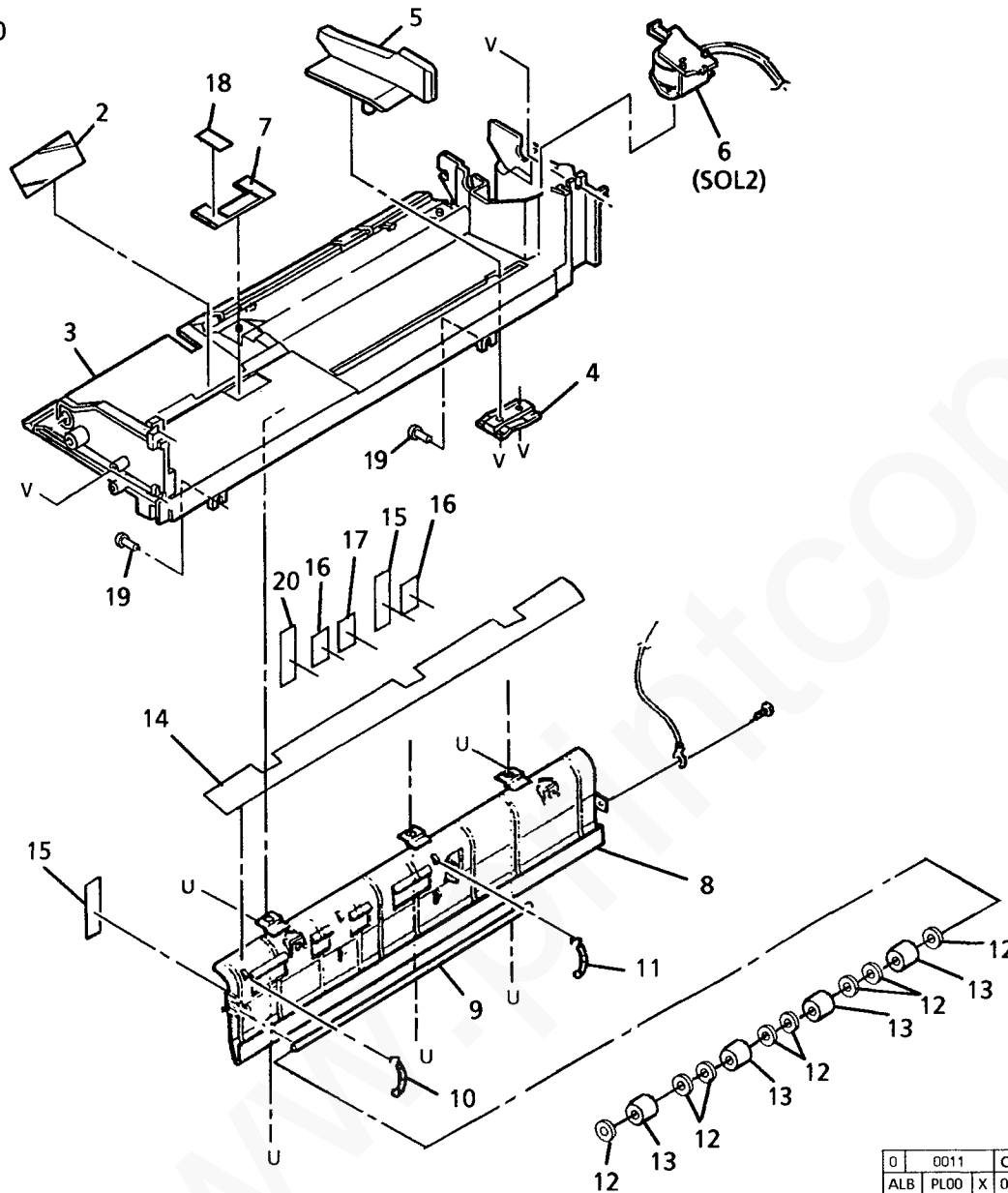
PL 4.9 BYPASS ASSEMBLY (1 OF 3)



ITEM	PART	DESCRIPTION
1	22K37780	BYPASS TRAY ASSEMBLY (REP 7.2)
2	9E57690	SPRING
3	31E6930	ACTUATOR ARM
4	48E4190	SOLENOID HOUSING
5	121E10130	BYPASS NUDGER SOLENOID (SOL3)
6	22E18270	FEED ROLLER (REP 7.8)
7	7E14840	GEAR (20T)
8	13E9660	BEARING (6MM)
9	5E9590	SPACER
10	9E17190	CLUTCH SPRING
11	16E9670	CLUTCH SLEEVE
12	7E29660	CLUTCH GEAR
13	6E42840	CLUTCH SHAFT
14	7E29570	GEAR (16T)
15	49E13530	SUPPORT FRAME
16	22E15280	NUDGER ROLLER
17	9E57700	FEED ROLL SPRING
18	7E29580	GEAR (22T)
19	6E42850	IDLER SHAFT
20	4E8740	CUSHION
21	22K37850	RETARD ROLLER
22	49E13540	SUPPORT
23	9E57720	SPRING
24	--	EXIT GUIDE (P/O ITEM 1)
25	--	FRAME (P/O ITEM 1)

PL 4.10A BYPASS ASSEMBLY (2 OF 3)

1 { 2-20

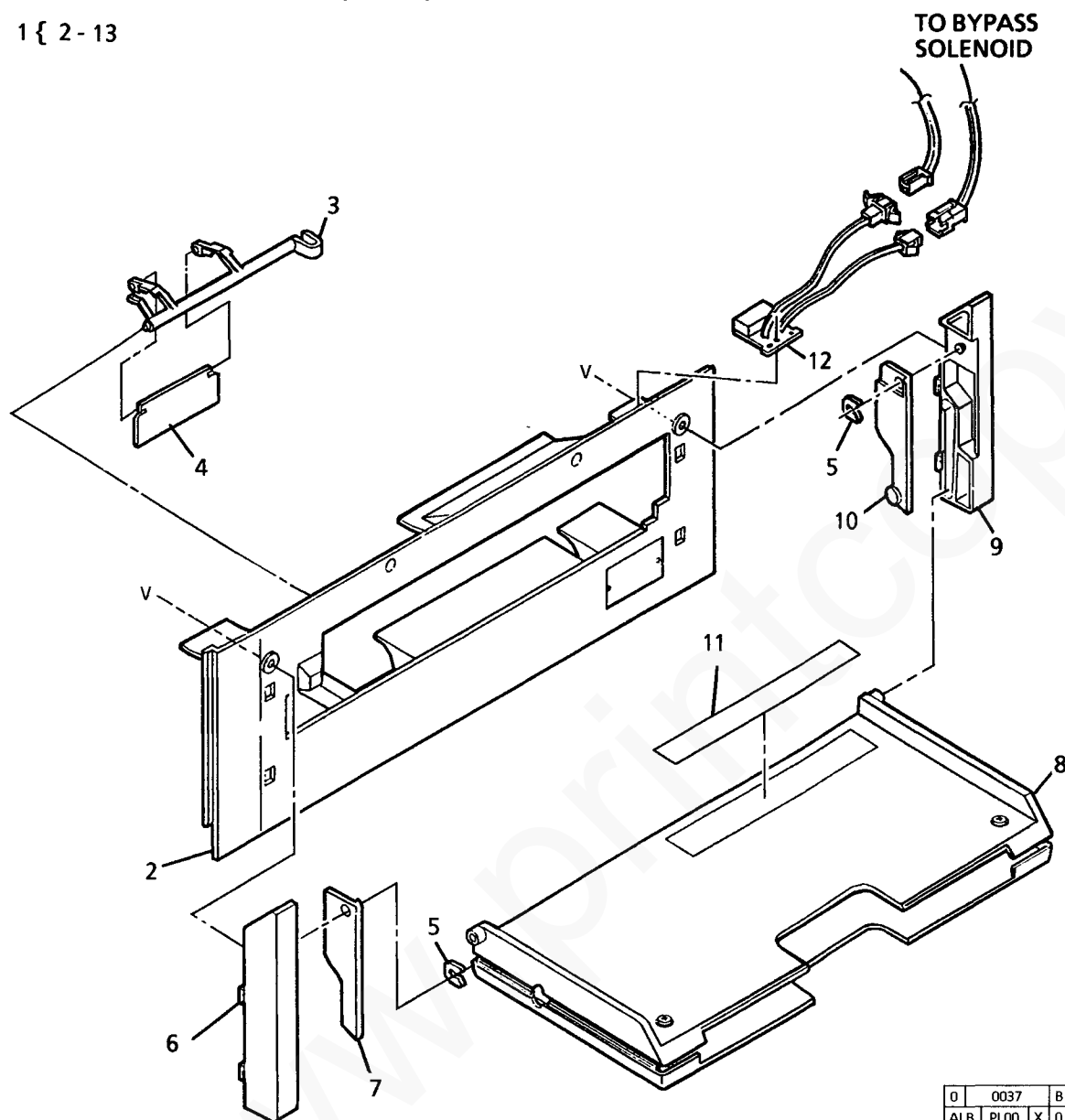


ITEM	PART	DESCRIPTION
1	--	BYPASS ASSEMBLY (P/O ITEM 1, PL4.9)
2	38E13580	PLASTIC GUIDE
3	--	BYPASS FRAME (P/O ITEM 1)
4	10E3550	PAPER GUIDE SLIDE
5	38E13600	PAPER GUIDE
6	121E10140	BYPASS FEED SOLENOID (SOL 2)
7	19E27030	RETARD PAD
8	38E14630	BYPASS GUIDE
9	6E47750	SHAFT
10	9E57090	SPRING (IB)
11	9E66720	SPRING (OB)
12	5E10360	ROLL FLANGE
13	22E16560	ROLL
14	38E14670	UPPER GUIDE
15	38E15330	GUIDE (D) (2 PLACES)
16	38E14640	GUIDE (A) (1 PLACE FOR 8.5X11) (2 PLACES FOR A4)
17	38E14650	GUIDE (B)(1 PLACE)
18	38E14680	FEEDER GUIDE
19	26E44030	SCREW (M3X8)
20	38E15340	GUIDE (E)(1 PLACE)

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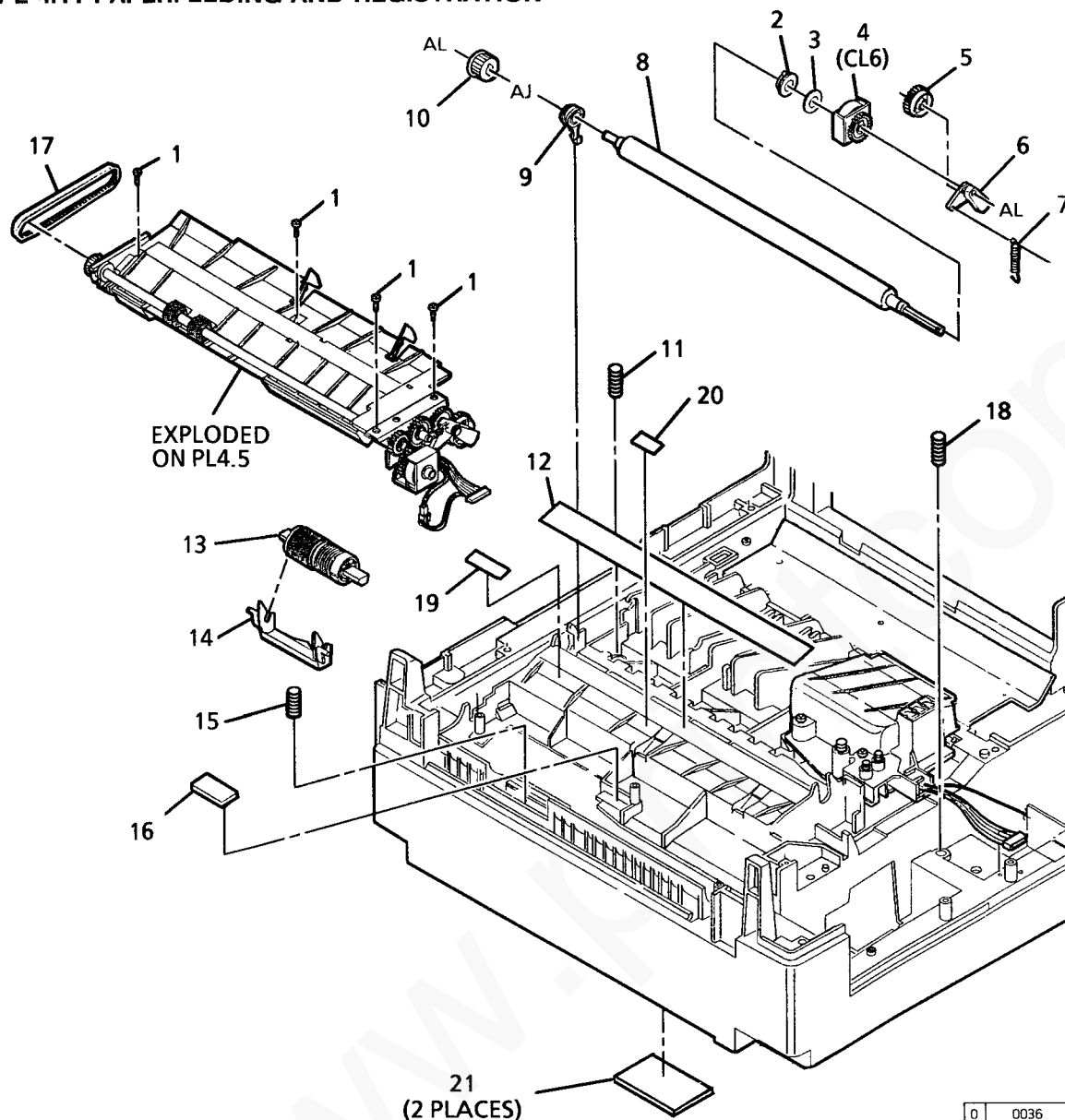
PL 4.10B BYPASS ASSEMBLY (3 OF 3)

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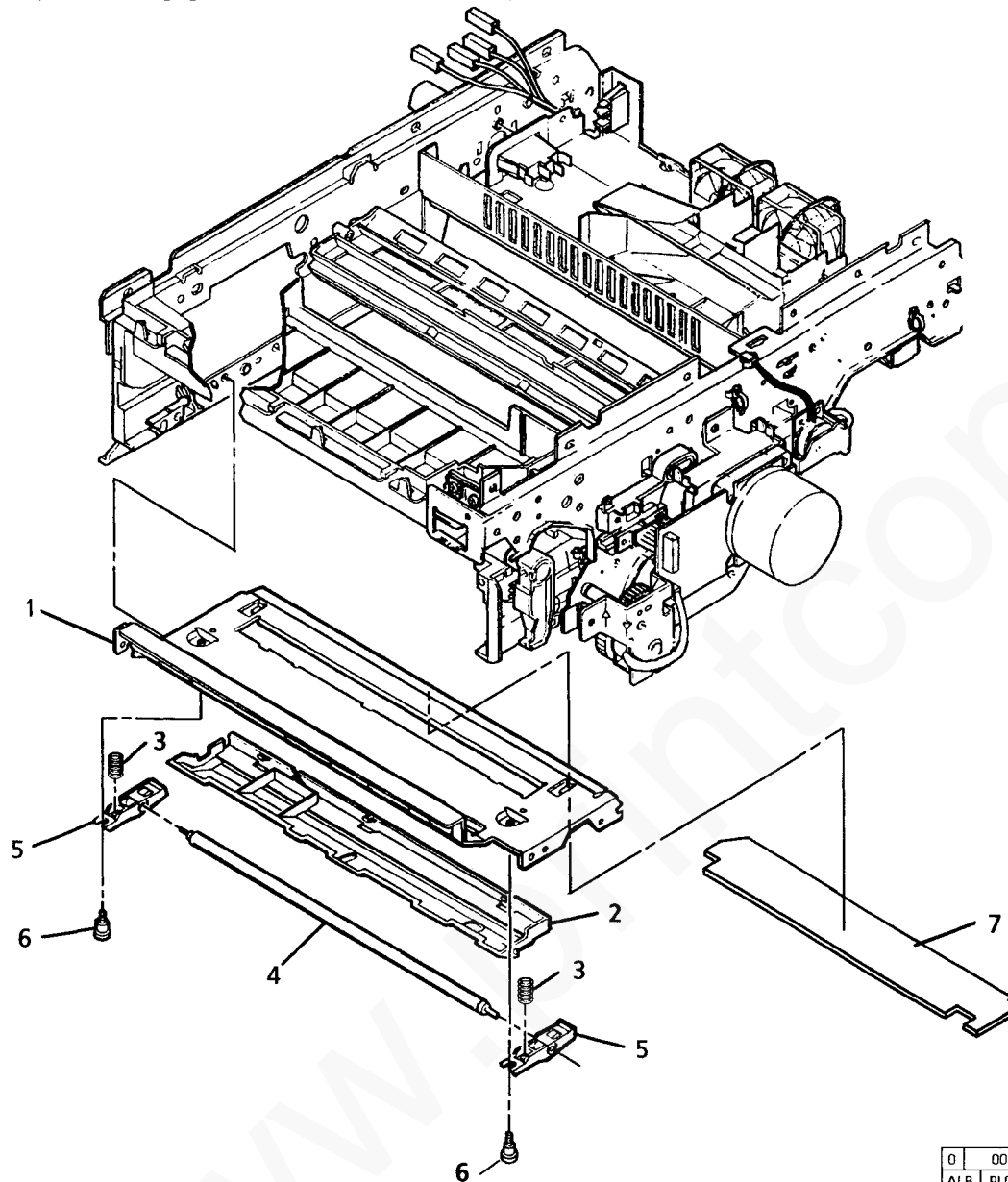
ITEM	PART	DESCRIPTION
1	--	BYPASS ASSEMBLY (P/O ITEM 1, PL4.9)
2	48E4200	BYPASS COVER
3	31E6940	GATE ARM
4	50E10430	BYPASS GATE
5	19E26740	PLASTIC CLIP
6	38E13620	TRAY FRONT GUIDE
7	12E7550	FRONT LINK
8	50K21220	BYPASS TRAY
9	38E13610	TRAY REAR GUIDE
10	12E6970	REAR LINK
11	--	SIZE LABEL
12	160K1600	CONNECTOR PWB

PL 4.11 PAPERFEEDING AND REGISTRATION



ITEM	PART	DESCRIPTION
1	26E43680	SCREW (M4X12)
2	13E9750	BEARING
3	28E10530	WASHER
4	5K3580	REGISTRATION CLUTCH (CL6)
5	7E29790	GEAR (25T)
6	31E6950	ARM
7	9E57920	SPRING
8	22E15540	REGISTRATION ROLL
9	13E9740	BEARING
10	20E20690	PULLEY (24T)
11	9E63690	SPRING
12	--	FEED GUIDE (NOT SPARED)
13	22K45150	RETARD ROLLER (REP 7.7)
14	49E13820	SUPPORT
15	9E70250	SPRING
16	19E26830	PAD
17	23E11530	TRANSPORT ROLLER DRIVE BELT
18	9E66440	GROUNDING SPRING (250 SHEET)
-	9E66430	GROUNDING SPRING (500 SHEET)
19	38E14540	GUIDE (3 PLACES)
20	38E14550	GUIDE (2 PLACES)
21	600S7514	ANTI-SKID PAD KIT

PL 4.12 UPPER REGISTRATION COMPONENTS

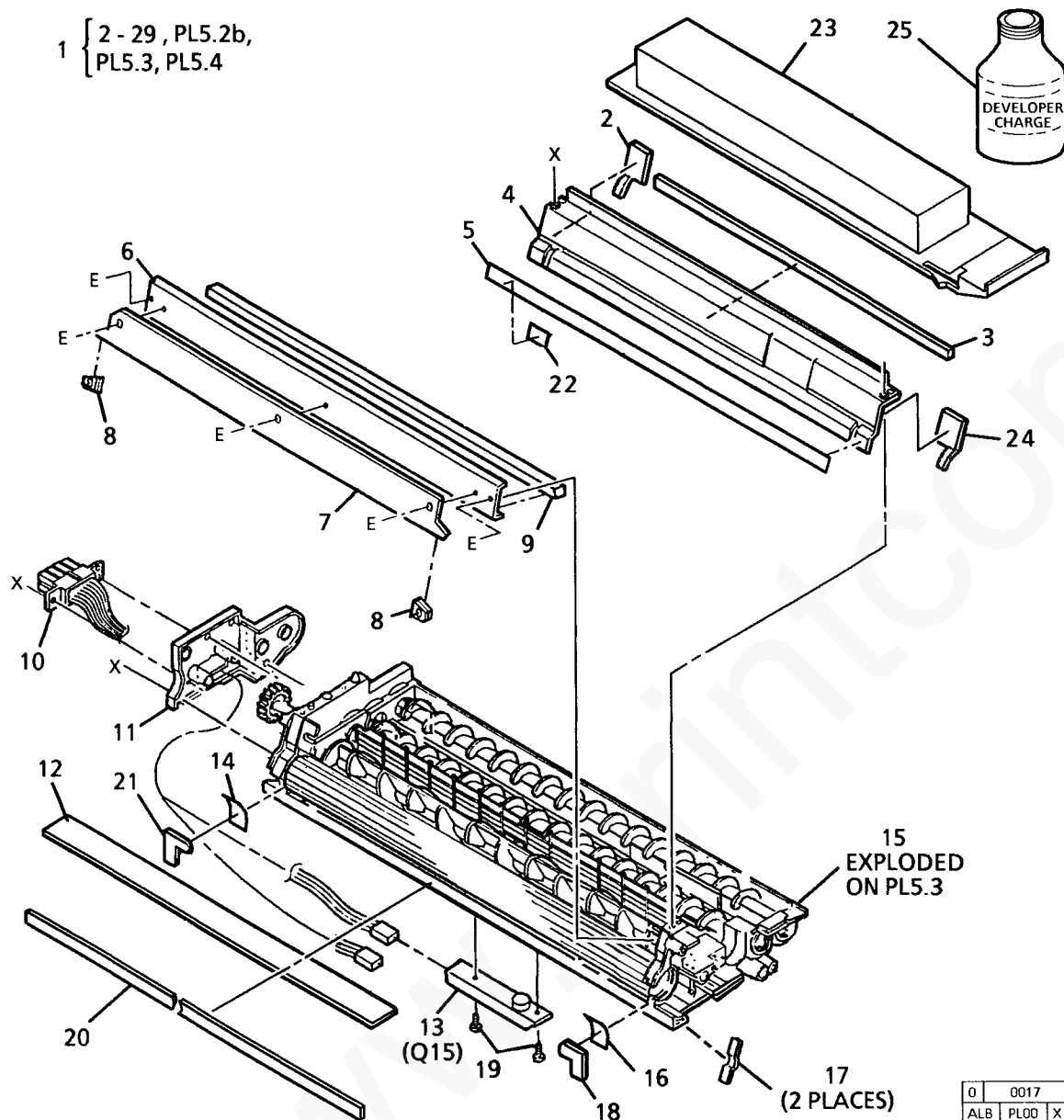


ITEM	PART	DESCRIPTION
1	--	DEVELOPER HOUSING SUPPORT (NOT SPARED)
2	38E13650	PAPER GUIDE
3	9E57830	REGISTRATION PINCH ROLL SPRING
4	22E15330	REGISTRATION PINCH ROLL
5	49E13720	REGISTRATION PINCH SUPPORT
6	26E44040	SHOULDER SCREW
7	32E7470	MYLAR GUIDE

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PL 5.2A DEVELOPER ASSEMBLY (1 OF 3)

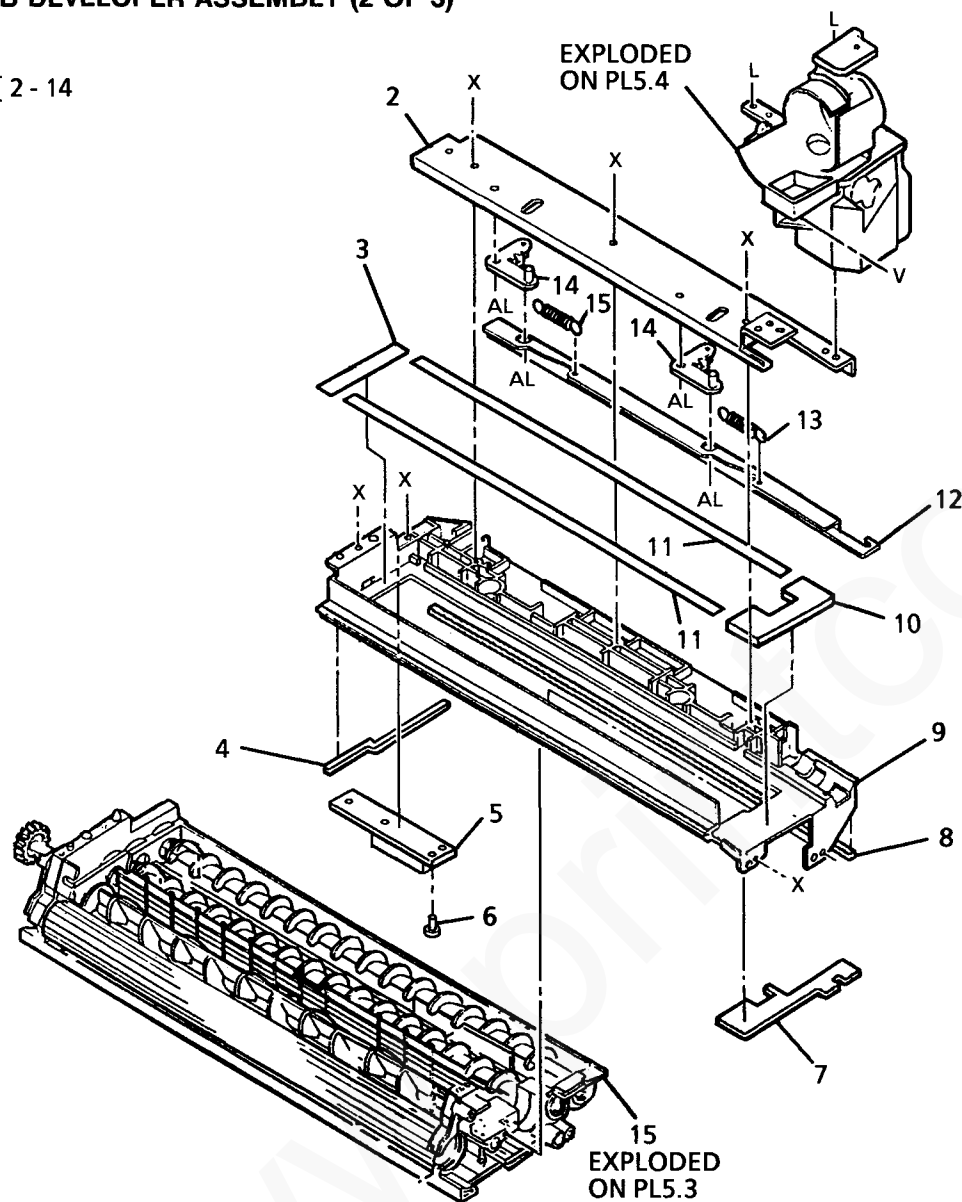
1 { 2 - 29, PL5.2b,
PL5.3, PL5.4



ITEM	PART	DESCRIPTION
1	48K19190	DEVELOPER ASSEMBLY (W/TAG 2)(REP 9.3)
2	--	REAR SEAL (P/O ITEM 1)
3	--	CENTER SEAL (P/O ITEM 1)
4	--	COVER (P/O ITEM 1)
5	--	MYLAR SEAL (P/O ITEM 1)
6	--	BLADE SUPPORT (P/O ITEM 1)
7	--	METERING BLADE (P/O ITEM 1)
8	--	REAR SEAL (P/O ITEM 1)
9	--	FRONT SEAL (P/O ITEM 1)
10	--	HARNESS (P/O ITEM 1)
11	--	REAR COVER (P/O ITEM 1)
12	48E4310	PLASTIC COVER
13	130E6680	DRY INK SENSOR (Q15)
14	35E25940	MAG ROLL REAR SEAL
15	--	DEVELOPER BASE (P/O ITEM 1)
16	35E25950	MAG ROLL FRONT SEAL
17	35E31550	SEAL
18	35E31570	SEAL
19	26E44310	SCREW (M3X6)
20	35E31560	SEAL
21	35E31580	SEAL
22	35E31540	SEAL
23	50K22430	DEVELOPER CARTRIDGE (INITIAL CHARGE) (REP 9.7)
24	--	FRONT SEAL (P/O ITEM 1)
25	502S64233	DEVELOPER (REPLACEMENT)

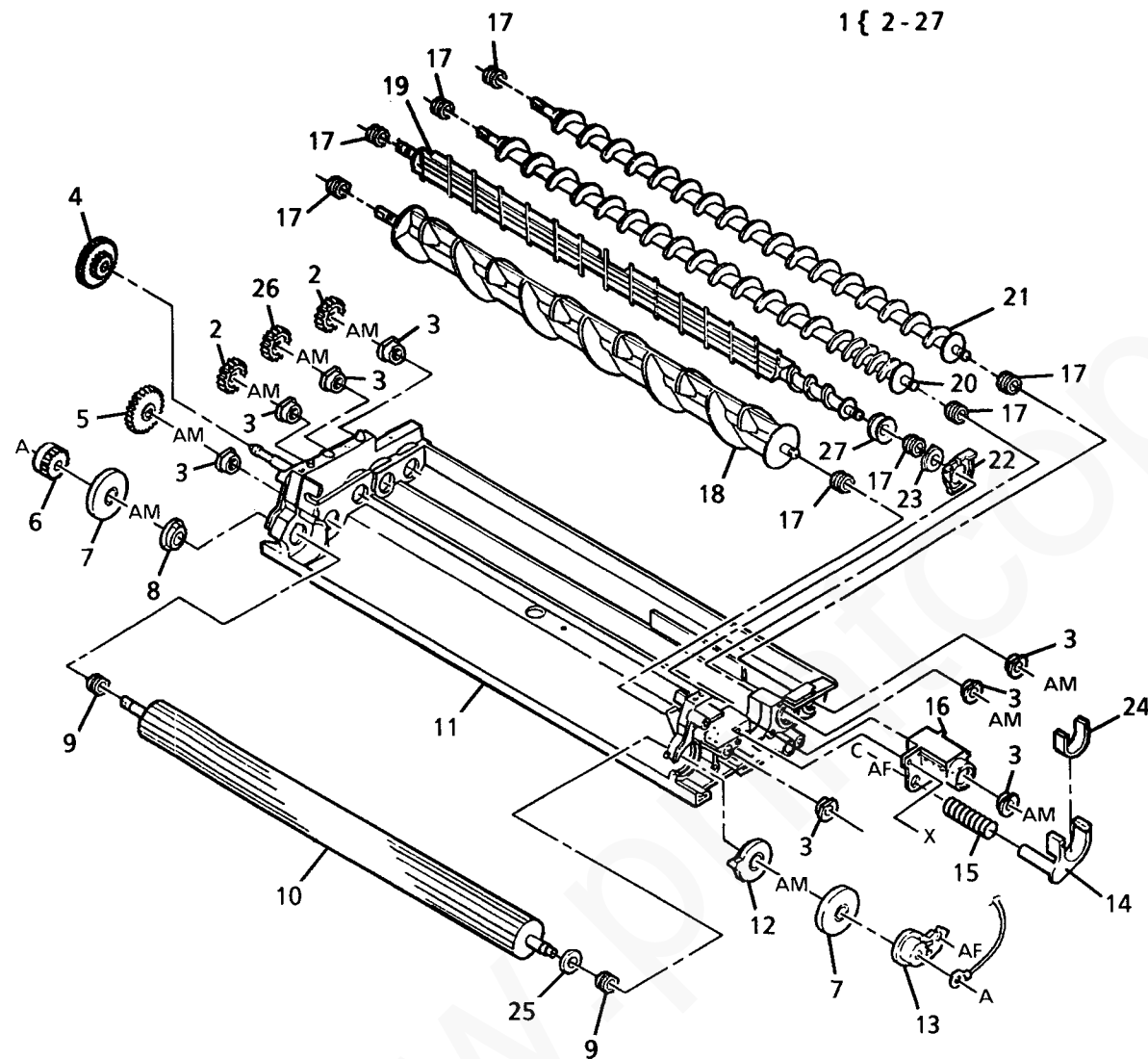
PL 5.2B DEVELOPER ASSEMBLY (2 OF 3)

1 { 2 - 14



ITEM	PART	DESCRIPTION
1	--	DEVELOPER ASSEMBLY (P/O ITEM 1, PL5.2A) (REP 9.3)
2	49E31340	SUPPORT
3	--	FELT SEAL (P/O ITEM 1)
4	--	FOAM SEAL (P/O ITEM 1)
5	15E45220	MAGNETIC PLATE
6	26E46060	SCREW
7	--	FOAM SEAL (P/O ITEM 1)
8	--	SEAL (P/O ITEM 1)
9	--	FRAME (P/O ITEM 1)
10	--	FELT SEAL (P/O ITEM 1)
11	--	FELT SEAL (P/O ITEM 1)
12	120E10290	LINK
13	9E63680	SPRING
14	31E7280	POSITION LEVER
15	9E69560	SPRING

PL 5.3 DEVELOPER ASSEMBLY (2 OF 2)



ITEM	PART	DESCRIPTION
1	--	DEVELOPER ASSEMBLY (P/O ITEM 1, PL5.2)
2	7E29740	GEAR
3	13E9690	BEARING
4	7E29750	IDLER GEAR
5	7E29760	GEAR
6	7E29770	GEAR
7	14E27200	MAG ROLL SPACER
8	13E9700	MAG ROLL BEARING
9	35E25930	SHAFT SEAL
10	22K37860	MAG ROLL
11	--	DEVELOPER BASE (P/O ITEM 1)
12	13E9710	FRONT MAG ROLL BEARING
13	15E40580	MAG ROLL CAM (ADJ 9.2)
14	--	GATE (P/O ITEM 1)
15	--	SPRING
16	--	CHUTE (P/O ITEM 1)
17	35E25960	AUGER SEAL
18	--	STIR AUGER (P/O ITEM 1)
19	--	AUGER 2 (P/O ITEM 1)
20	--	AUGER 3 (P/O ITEM 1)
21	--	AUGER 4 (P/O ITEM 1)
22	--	PLATE (P/O ITEM 1)
23	15E45300	SEAL
24	--	SEAL (P/O ITEM 1)
25	14E27900	SPACER
26	7E34520	GEAR
27	35E33840	SEAL

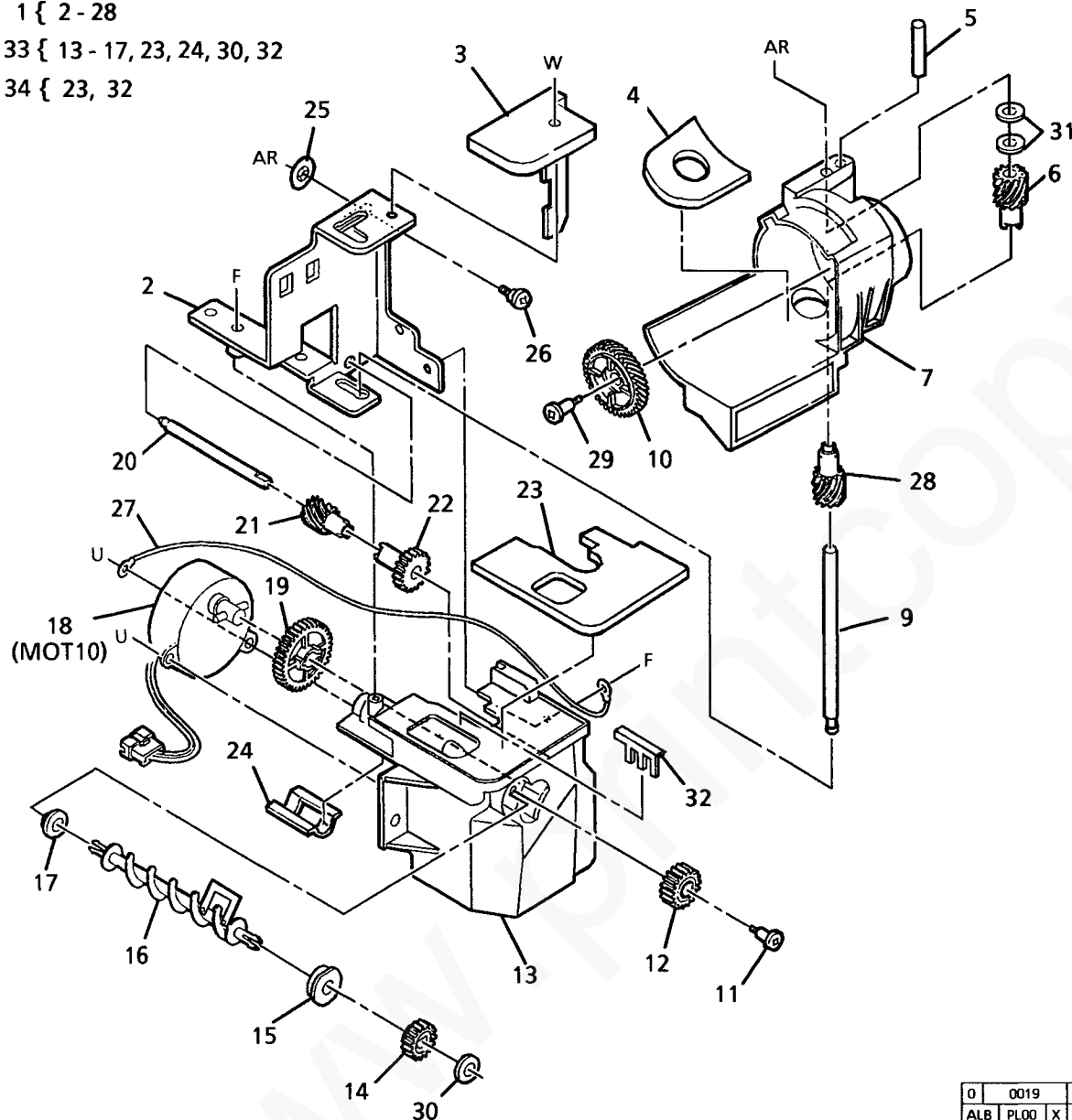
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PL 5.4 TONER DISPENSER ASSEMBLY

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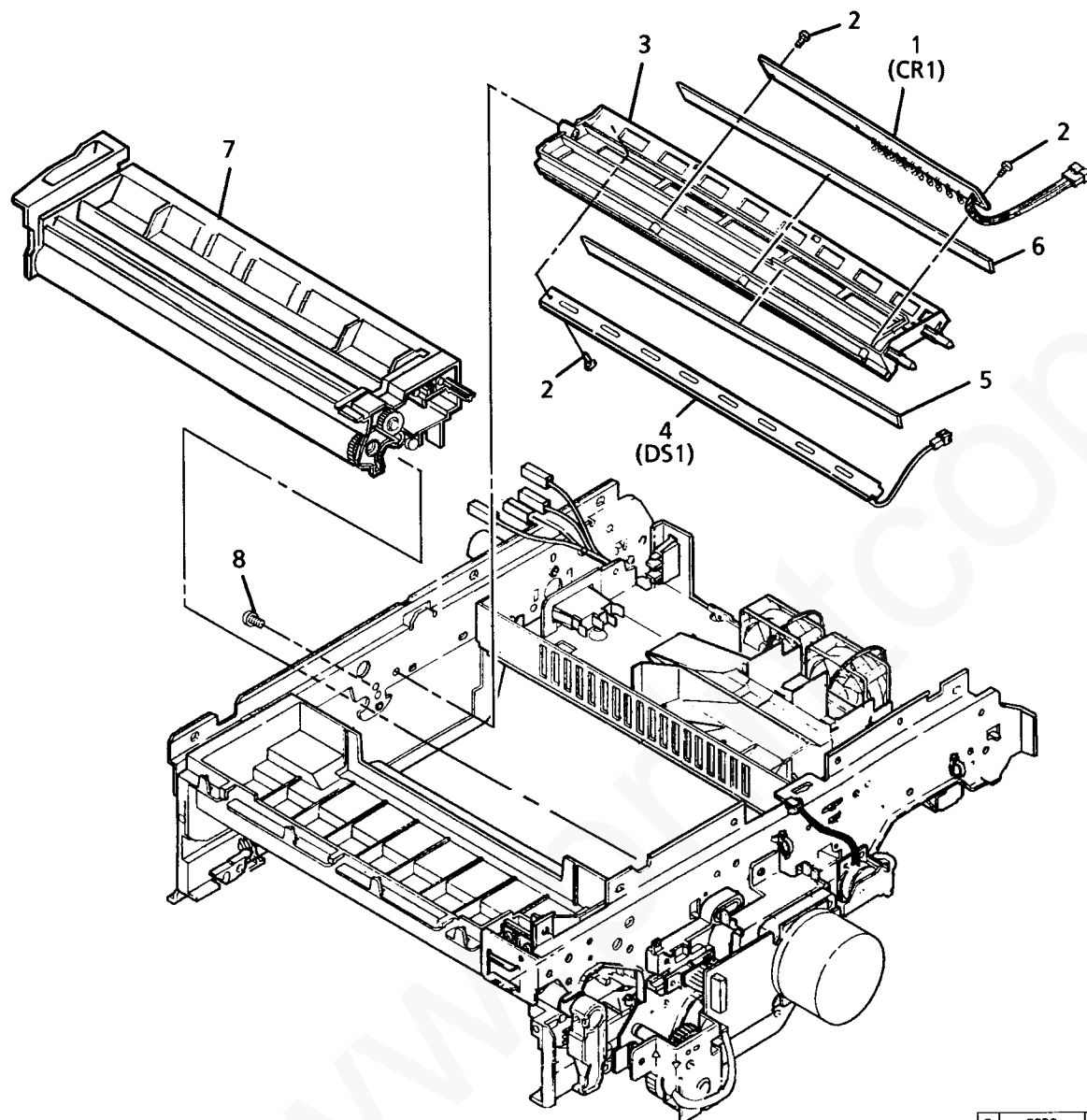
34 { 23, 32



ITEM	PART	DESCRIPTION
1	94K2940	DRY INK DISPENSER ASSEMBLY
2	--	DISPENSER SUPPORT (P/O ITEM 1)
3	--	COVER (P/O ITEM 1)
4	35E26040	FELT SEAL
5	6E42950	PIVOT SHAFT
6	7E29970	GEAR (7T)
7	--	DISPENSER HOUSING (P/O ITEM 1)
8	--	(PART NO LONGER USED)
9	--	PIVOT SHAFT (P/O ITEM 1)
10	7E29980	GEAR (39T)
11	26E39270	SHOULDER SCREW
12	7E29990	GEAR (16T)
13	--	TONER HOPPER (P/O ITEM 33)
14	--	(REP 9.6)
15	--	GEAR (14T) (P/O ITEM 33)
16	--	BEARING SEAL (P/O ITEM 33)
17	--	TONER AUGER (P/O ITEM 33)
18	127E9130	BEARING (P/O ITEM 33)
19	--	DRY INK MOTOR (MOT 10)
20	7E30010	GEAR (29T)
21	--	SHAFT (P/O ITEM 1)
22	7E30020	GEAR (11T)
23	7E34130	GEAR (16T)
24	--	SEAL (P/O ITEMS 33/34)
25	--	SEAL (P/O ITEM 33)
26	28E10860	WASHER
27	26E44340	SHOULDER SCREW
28	--	GROUND WIRE (P/O ITEM 1)
29	7E34140	GEAR (11T)
30	26E46100	SHOULDER SCREW
31	--	WASHER (P/O ITEM 33)
32	28E10850	WASHER (M6)
33	--	SCRAPE OFF SHEET (P/O ITEMS 33/34)
34	48K43010	TONER HOPPER ASSEMBLY (W/TAG P-001)
	600K53110	TONER DISPENSER AUGER REPAIR KIT (TAG P-043)

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PL 5.5 EDGE ERASE AND CRU



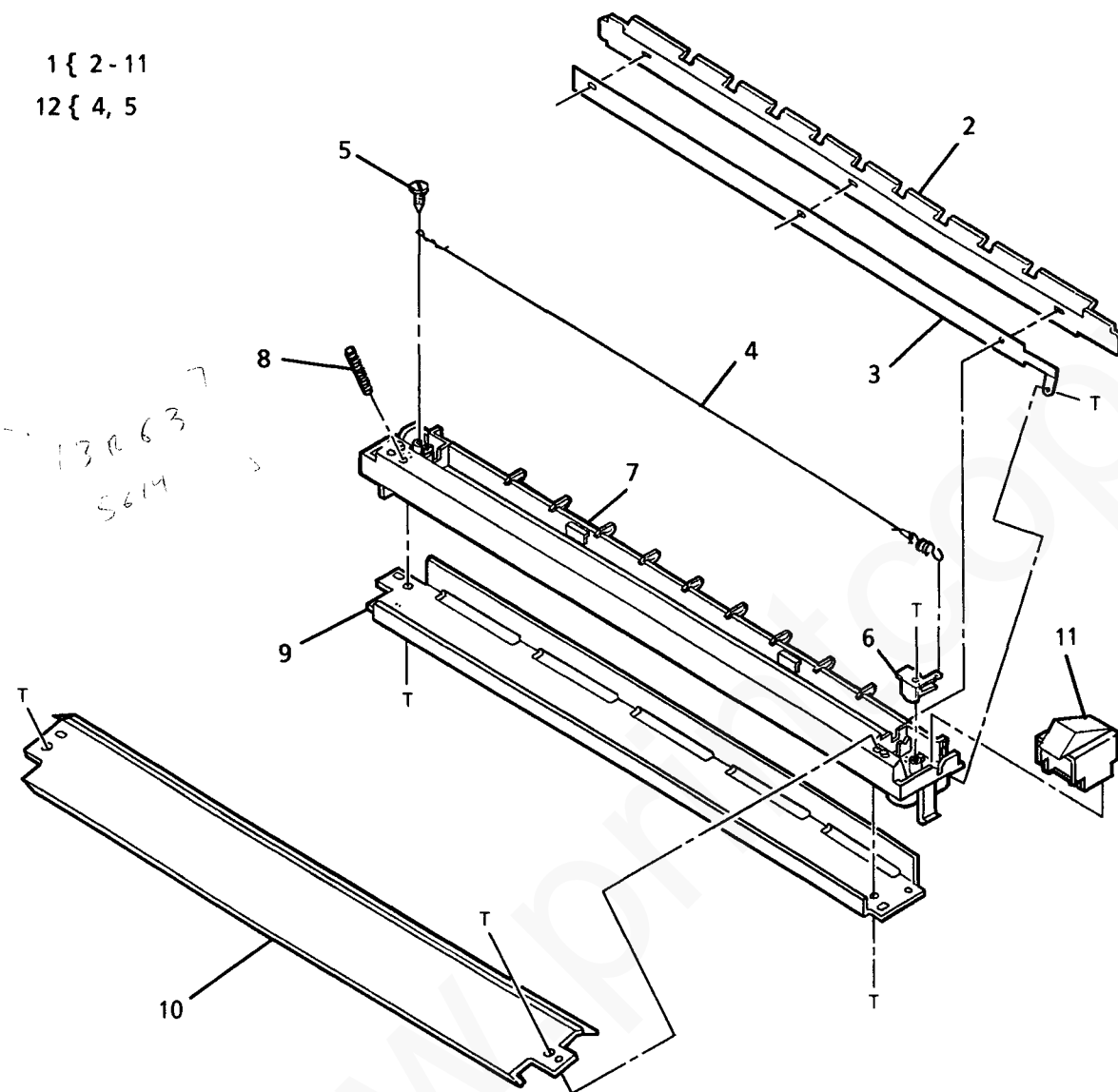
ITEM	PART	DESCRIPTION
1	160K1610	EDGE ERASE LAMP (1:1)(CR1)
-	160K8220	EDGE ERASE LAMP (R/E)(CR1)
2	26E44030	SCREW (M3X8)
3	49E48230	EDGE ERASE SUPPORT
4	122K1500	DISCHARGE LAMP (DS1)
5	48E17010	COVER
6	48E20410	COVER
7	113R79	CRU (USO)
-	113R80	CRU (USO - PARTNERSHIP)
-	113R81	CRU (RX)
-	113R82	CRU (XCL/XLA)
-	113R85	(USO/XCL/XLA - RETAIL)
-	113R86	CRU (RX - RETAIL)
8	26E48460	SCREW

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PL 5.6 T/D COROTRON ASSEMBLY

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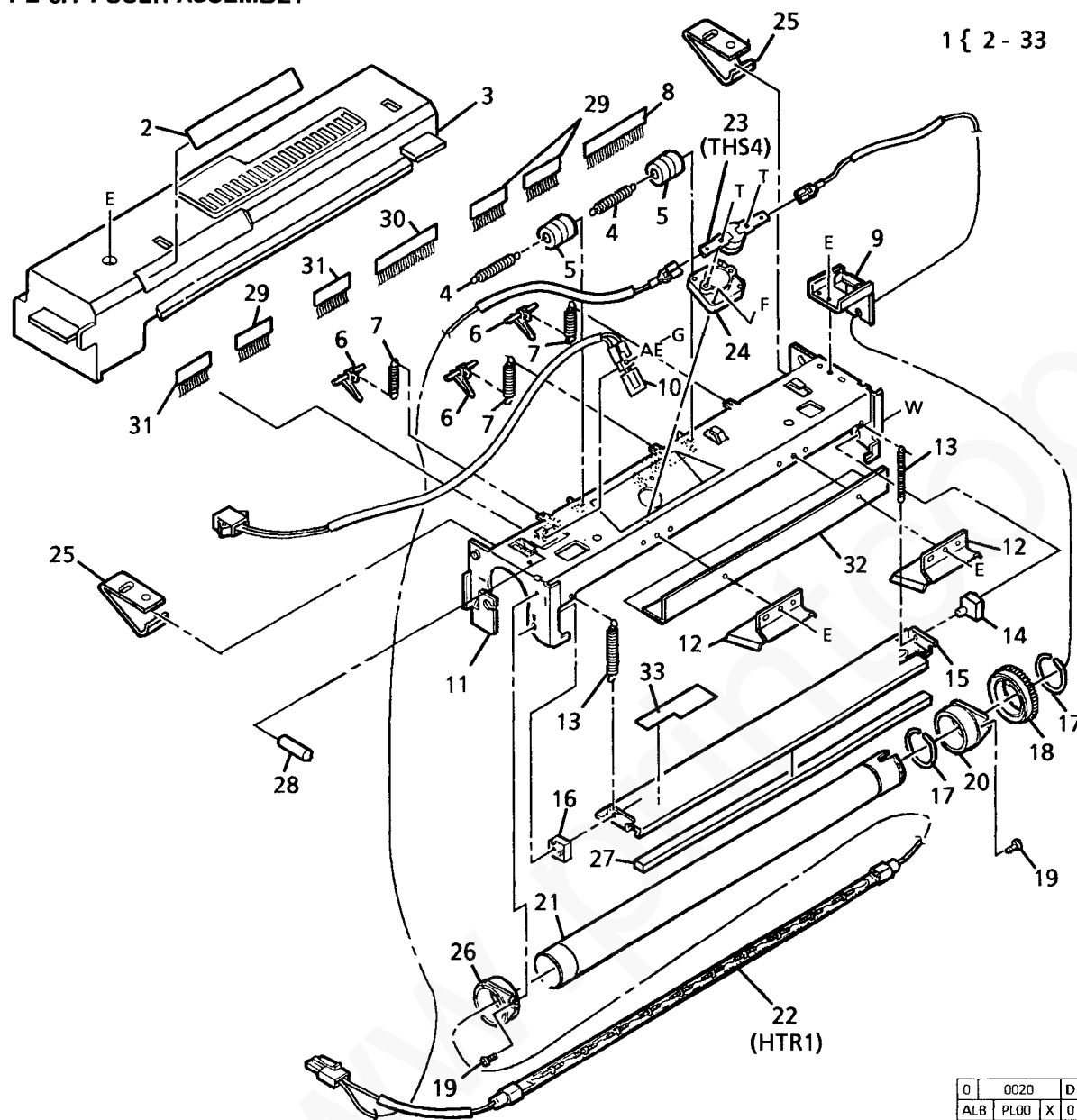
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ITEM	PART	DESCRIPTION
1	125K2060	TRANSFER/DETACK COROTRON ASSEMBLY (REP 9.1)
2	--	GUIDE (P/O ITEM 1)
3	--	DETACK COROTRON (P/O ITEM 1) (REP 9.4)
4	--	TRANSFER COROTRON WIRE (P/O ITEM 12) (REP 9.5)
5	--	SCREW (P/O ITEM 12)
6	--	CONTACT (P/O ITEM 1)
7	--	COROTRON HOUSING (P/O ITEM 1)
8	9E58010	GROUNDING SPRING
9	--	SHIELD (P/O ITEM 1)
10	--	COROTRON GUIDE (P/O ITEM 1)
11	48E17020	COVER
12	600K46290	COROTRON WIRE REPAIR KIT (5/KIT)

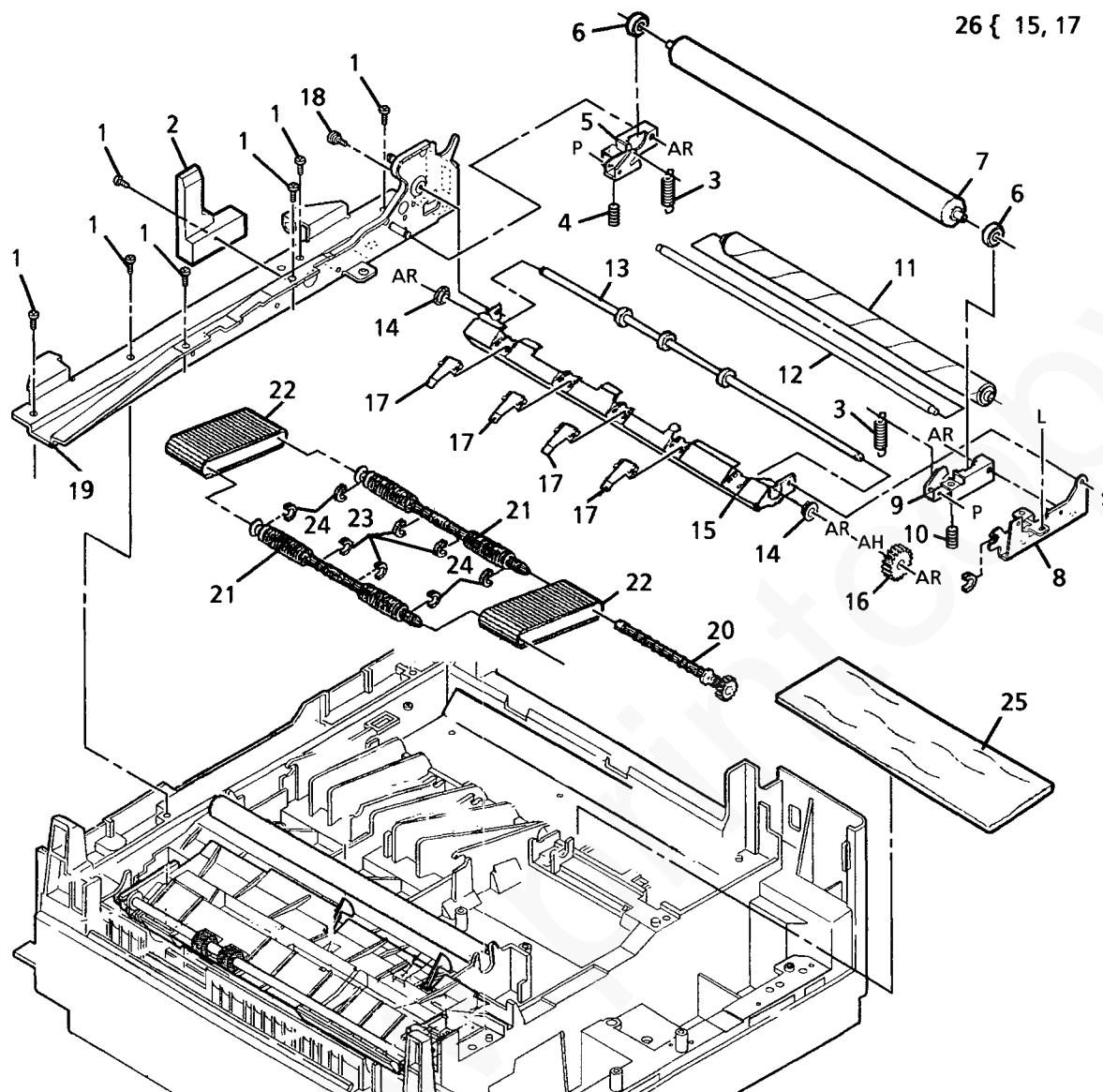
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PL 6.1 FUSER ASSEMBLY



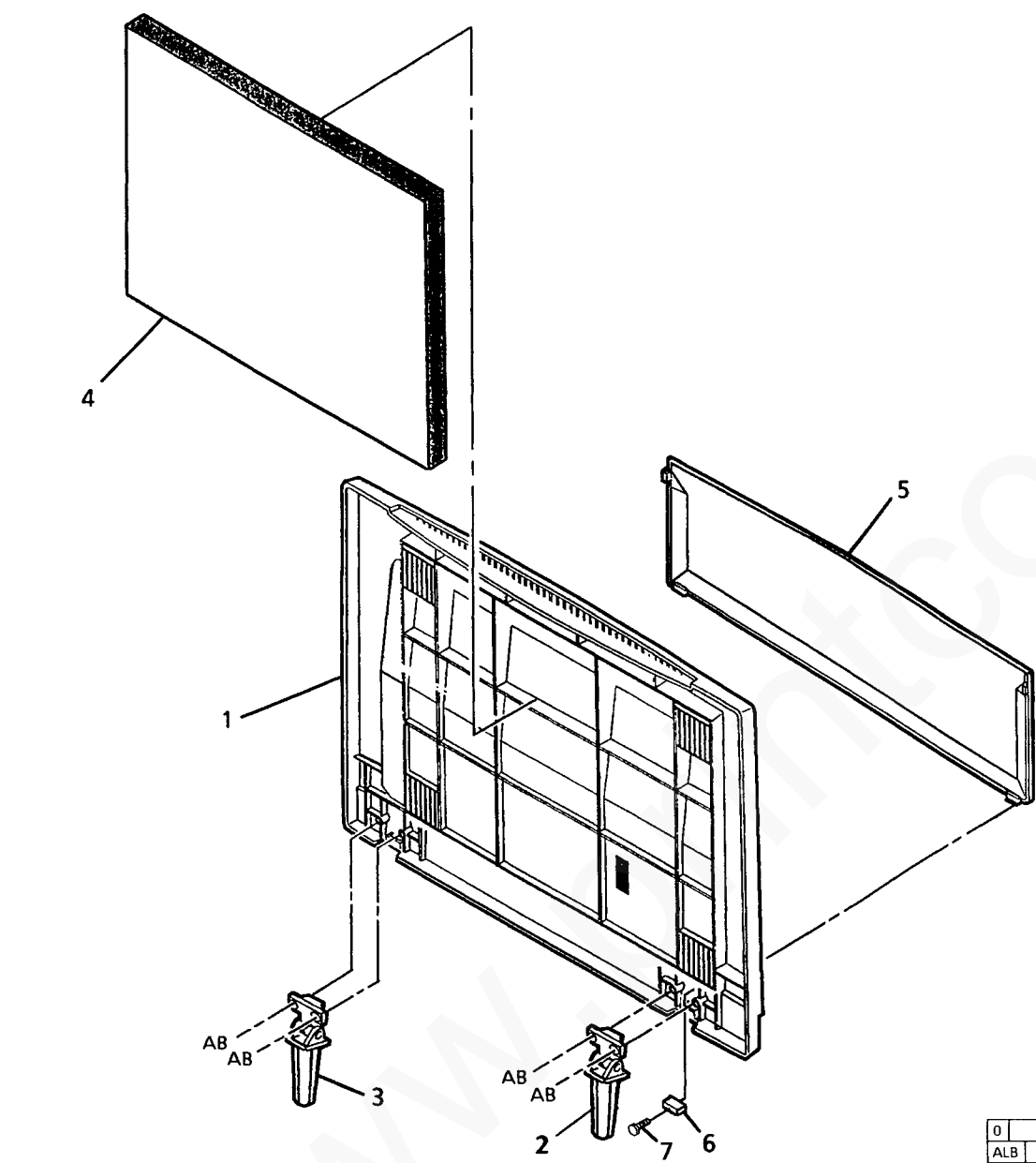
ITEM	PART	DESCRIPTION
1	126K4230	FUSER ASSEMBLY (120V)
-	126K4220	FUSER ASSEMBLY (220/240V) (REP 10.1)
2	96E20690	LABEL
3	48E4240	FUSER COVER
4	9E57760	SPRING
5	22E15310	ROLLER
6	19E26790	STRIPPER FINGER
7	9E57770	SPRING
8	115E4480	ANTISTATIC BRUSH
9	--	HEAT ROD SUPPORT (P/O ITEM 1)
10	130E6670	THERMISTOR (RT1) (REP 10.5)
11	--	FUSER UPPER FRAME (P/O ITEM 1)
12	--	UPPER PAPER GUIDE (P/O ITEM 1)
13	9E57780	PAPER GUIDE SPRING
14	14E27170	REAR PIVOT BLOCK
15	38E13640	LOWER GUIDE
16	14E27180	FRONT PIVOT BLOCK
17	120E8390	RETAINING RING
18	7E29650	GEAR (48T)
19	26E43700	SCREW
20	13E9680	REAR BEARING
21	22E15320	FUSER HEAT ROLL (REP 10.3)
22	122K1450	FUSER HEAT ROD (120V)(HTR1)(REP 10.2)
-	122K1490	FUSER HEAT ROD (220/240V)(HTR1) (REP 10.2)
23	130E6660	OVERTEMPERATURE THERMOSTAT (THS4) (REP 10.4)
24	--	SUPPORT (P/O ITEM 1)
25	9E66490	SPRING (2 PLACES)
26	13E10300	FRONT BEARING
27	115E4440	STATIC BRUSH
28	52E10100	HARNESS TUBE (2 PLACES)
29	115E4490	ANTISTATIC BRUSH (3 PLACES)
30	115E4500	ANTISTATIC BRUSH
31	115E4510	ANTISTATIC BRUSH (2 PLACES)
32	33K2380	FUSER ROLL CLEANING BLADE (REP 10.9)
33	38E15540	PAPER GUIDE

PL 6.2 FUSER OUTPUT ROLLS



ITEM	PART	DESCRIPTION
1	26E43680	SCREW (M4X12)
2	--	CRU GUIDE (NOT SPARED)
3	9E57910	CLEANING ROLL SPRING
4	9E57900	PRESSURE ROLL SPRING
5	--	SUPPORT BRACKET (NOT SPARED)
6	13E9720	PRESSURE ROLL BEARING
7	22E15340	PRESSURE ROLL (REP 10.6)
8	--	DRIVE FRAME SUPPORT (NOT SPARED)
9	--	REAR SUPPORT BRACKET (NOT SPARED)
10	--	REAR PRESSURE ROLL SPRING (CANCELED)
11	22K37870	FUSER CLEANING ROLL (REP 10.7)
12	6E46030	CLEANING ROLL SHAFT
13	22E18440	EXIT ROLLER (REP 10.8)
14	13E9760	BEARING
15	38E13670	SUPPORT GUIDE (ALSO P/O ITEM 26)
16	7E29780	GEAR (22T)
17	19E26820	PRESSURE ROLL STRIPPER FINGER (ALSO P/O ITEM 26, 5/KIT)
18	26E44320	SCREW
19	--	FRONT SUPPORT (NOT SPARED)
20	6E47560	DRIVE SHAFT
21	22E16490	TRANSPORT ROLLER SHAFT
22	23E12090	BELT
23	13E10310	BEARING
24	13E10320	BEARING
25	15E45240	HEAT SHIELD
26	600K50430	DUPLEX JAM REPAIR KIT (TAG P-047)

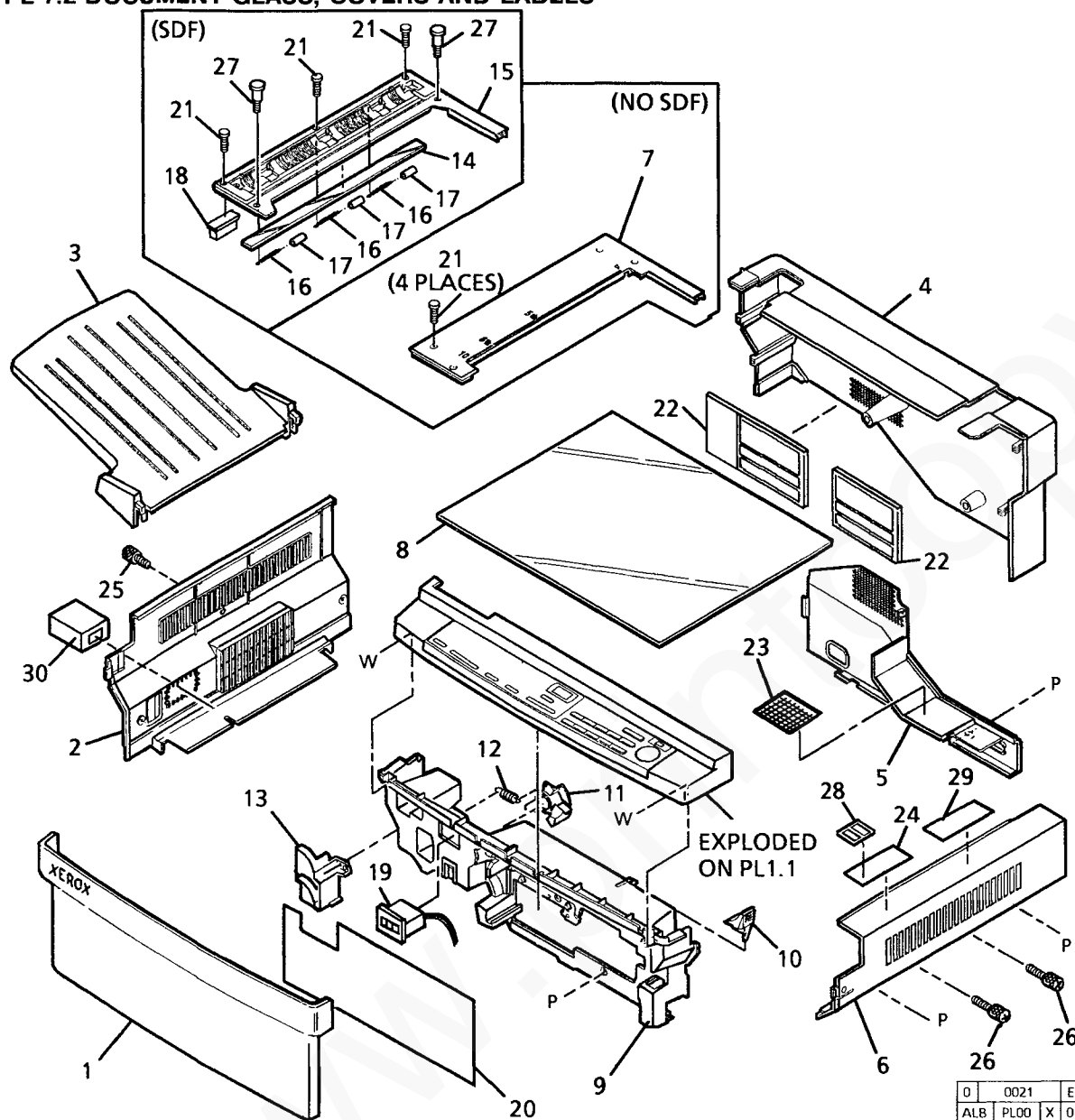
PL 7.1 DOCUMENT COVER



ITEM	PART	DESCRIPTION
1	48E4370	DOCUMENT COVER
2	36K810	RIGHT COUNTERBALANCE
3	36K820	LEFT COUNTERBALANCE
4	4K870	PAD
5	48E4380	DOCUMENT ORGANIZER
6	121E10960	MAGNET
7	26E49130	SCREW

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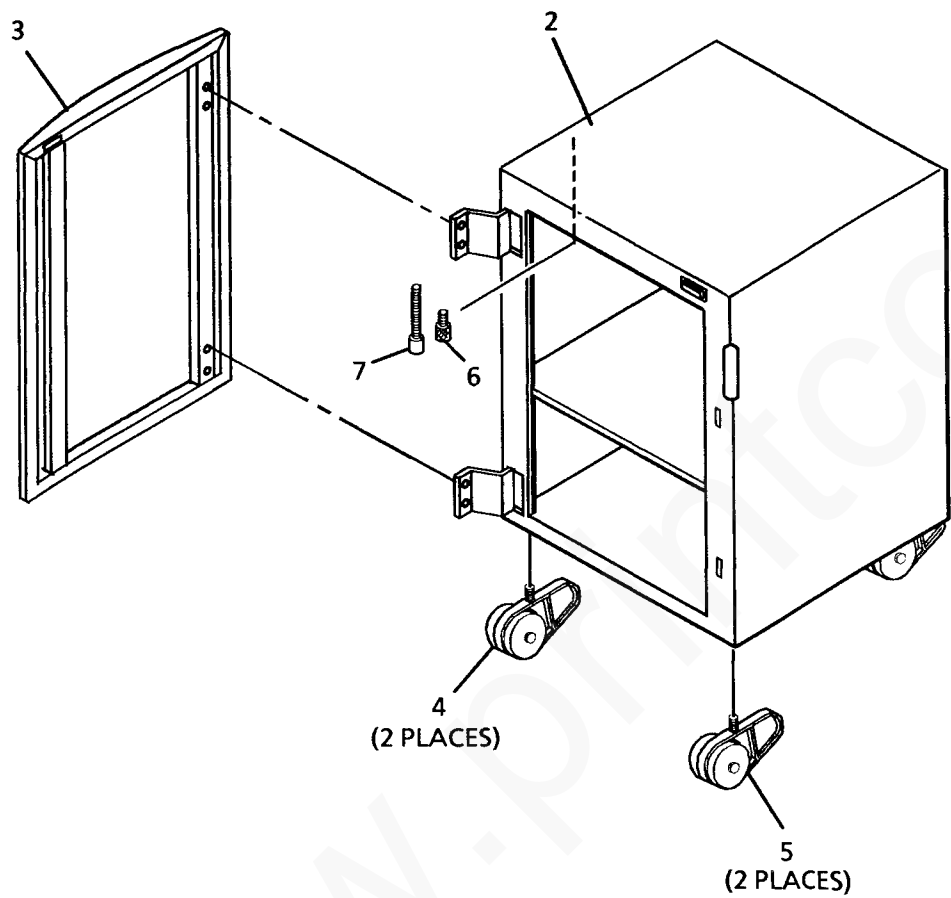
PL 7.2 DOCUMENT GLASS, COVERS AND LABELS



ITEM	PART	DESCRIPTION
1	48E4150	FRONT COVER
2	48E4100	LEFT COVER (REP 14.2)
3	50E10420	OUTPUT TRAY
4	48E4110	UPPER REAR COVER
-	48E16620	(PLATEN ONLY)(REP 14.3)
5	48E4120	UPPER REAR COVER
-	48E4130	(SDF ONLY)(REP 14.3)
6	48E4140	LOWER REAR COVER
-	48E4130	(120V) (REP 14.4)
7	48E4160	LOWER REAR COVER
-	48E4130	(220/240V) (REP 14.4)
8	90E1700	RIGHT COVER
9	48E4160	REGISTRATION GUIDE
10	90E1700	(W/O SDF)
11	3E27200	DOCUMENT GLASS (REP 6.1)
12	--	FRONT INNER COVER
13	3E27200	(NOT SPARED)(REP 14.5)
14	--	COPIER RELEASE HANDLE
15	48E30720	DRY INK CARTRIDGE
16	9E32760	LATCH
17	48E4170	RETURN SPRING
18	90E1880	CONNECTOR COVER
19	48E30720	SDF DOCUMENT GLASS
20	9E32760	(REP 5.11)
21	22E15730	SDF REGISTRATION GUIDE
22	121E10500	(REP 5.10)
23	128E480	SDF SPRING
24	96E25920	SDF PINCH ROLLER
25	26E48410	MAGNET
26	62E7590	COPY COUNTER
27	62E7600	OPERATOR LABEL
28	96E25930	SCREW (M3X8)
29	96E25890	SCREW (M3X8)
30	109R269	SCREW (M3X8)

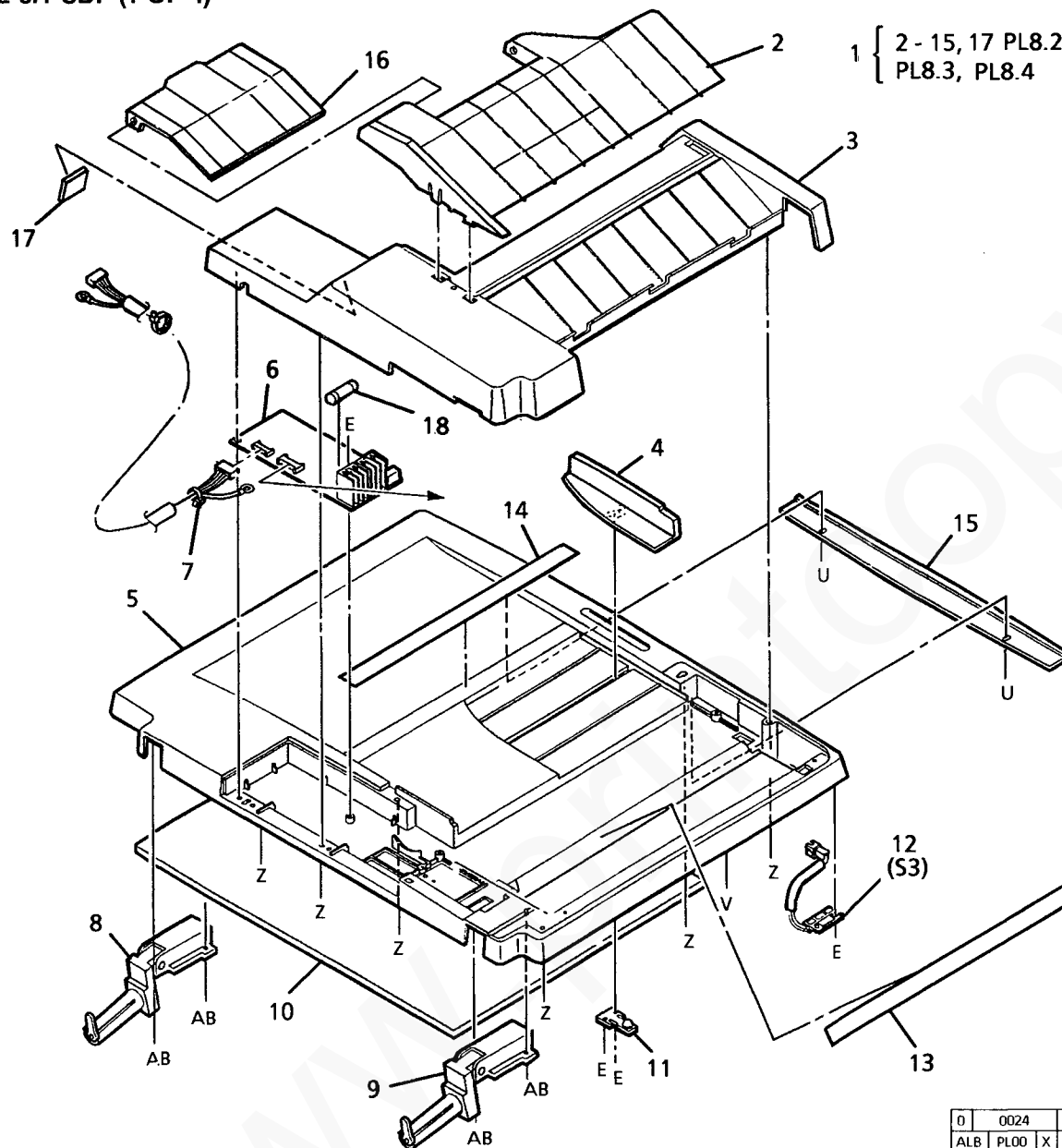
PL 7.3 MACHINE STORAGE CABINET

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ITEM	PART	DESCRIPTION
1	--	STORAGE CABINET (P/O 98K26230)
2	--	CABINET (P/O ITEM 1)
3	48K18890	DOOR
4	17K590	SWIVEL CASTER (ADJ 1.1)
5	17K600	CASTER (ADJ 1.1)
6	26E46170	THUMB SCREW (20MM) (USE W/O 2 TRAY MODULE)
7	26E46160	THUMB SCREW (110MM) (USE W/ 2 TRAY MODULE)

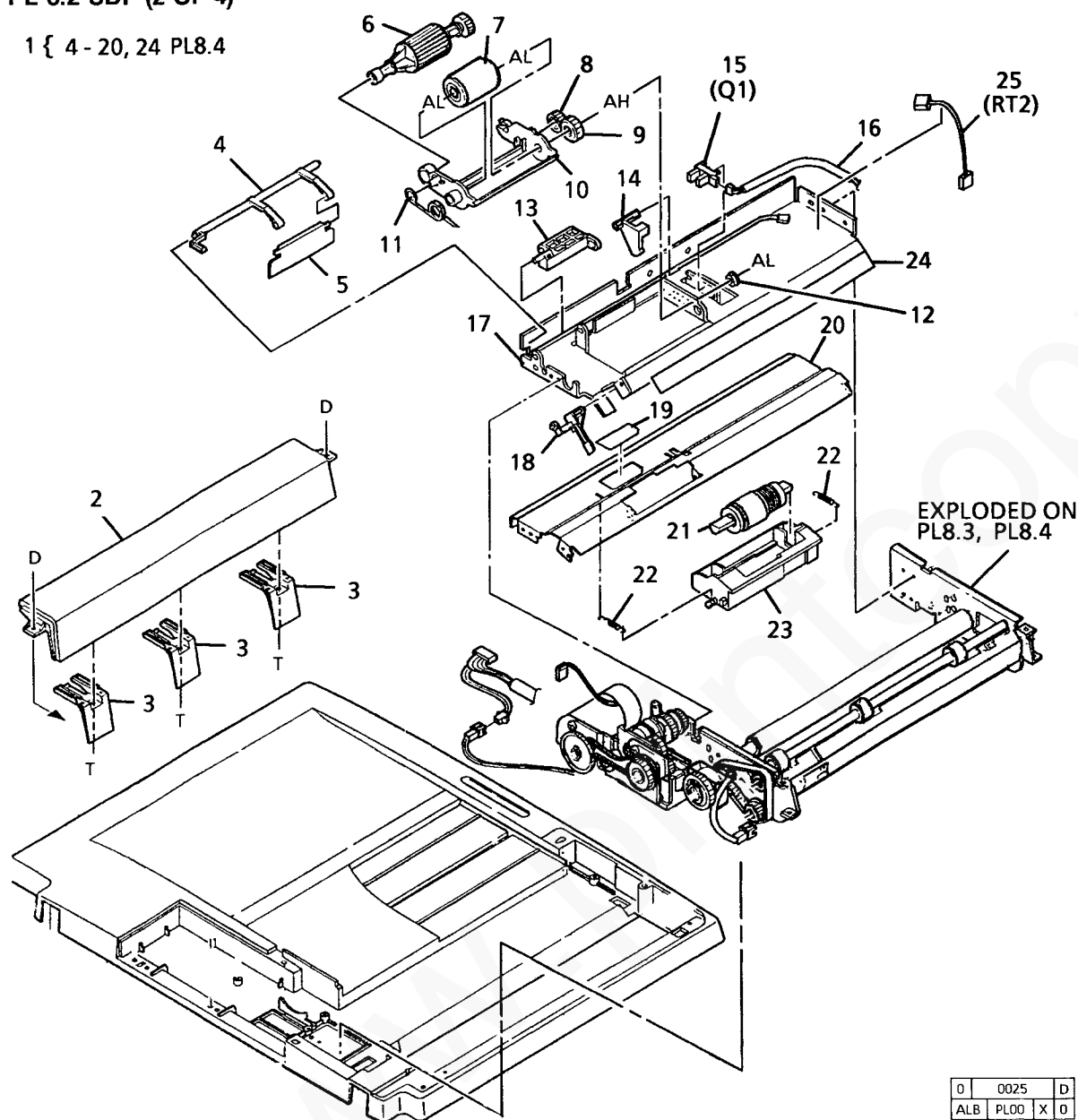
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ITEM	PART	DESCRIPTION
1	22K40640	SDF ASSEMBLY (220/240V) (REP 5.1)
-	--	SDF ASSEMBLY (120V) (P/O KIT 98K35200) (REP 5.1)
2	50E10500	SDF EXIT TRAY
3	48E4470	SDF DRIVES COVER (REP 5.2)
4	38E13730	DOCUMENT GUIDE
5	--	FEED TRAY (P/O ITEM 1)
6	160K1720	SDF PWB (120V)
-	160K8350	SDF PWB (220/240V)
7	162K2240	SDF INTERFACE HARNESS
8	36K1020	RIGHT COUNTERBALANCE
9	36K1090	LEFT COUNTERBALANCE (W/TAG 3)(ADJ 5.1)
-	606K5610	LEFT COUNTERBALANCE KIT(W/O TAG 3) (ADJ 5.1)
-	605K7880	ALTERNATE
10	4E6270	PAD
11	10E3560	DOCUMENT GUIDE SLIDE
12	110E6380	SDF INTERLOCK SWITCH (S3)
13	38E13720	PLASTIC GUIDE
14	96E26990	WIDTH LABEL
15	3E33060	HANDLE
16	50E11210	TRAY EXTENSION
17	53E4610	FILTER
18	--	FUSE (F301) (REP 1.8)

PL 8.2 SDF (2 OF 4)

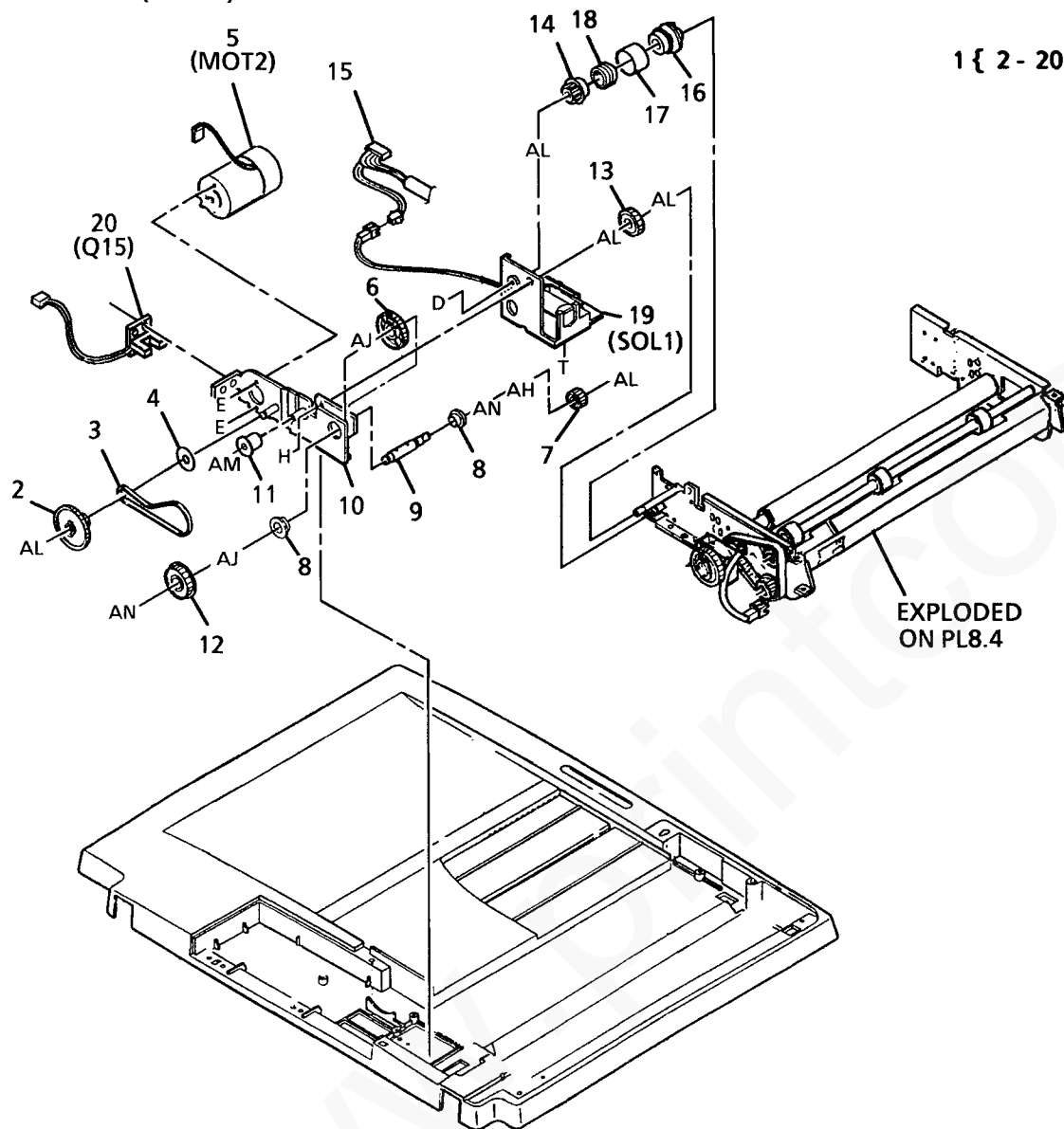
1 { 4 - 20, 24 PL8.4



ITEM	PART	DESCRIPTION
1	22K41690	SDF FEEDER ASSEMBLY (REP 5.5)
2	48E11870	EXIT COVER (REP 5.3)
3	9E58080	EXIT GUIDE
4	31E7010	GATE ARM
5	50E10520	SDF GATE
6	22E15280	NUDGER ROLLER
7	22E18270	FEED ROLLER
8	7E29570	GEAR (16T)
9	7E14840	GEAR (20T)
10	49E13900	SUPPORT
11	9E58150	FEED SPRING
12	13E9770	BEARING
13	12E7020	NUDGER LINK
14	120E8440	DOCUMENT PRESENT ACTUATOR
15	107E7470	DOCUMENT PRESENT SENSOR (Q1)
16	162K2250	SDF HARNESS
17	--	PAPER GUIDE (P/O ITEM 1)
18	120E8450	REGISTRATION SENSOR ACTUATOR
19	19E27630	RETARD PAD
20	--	LOWER PAPER GUIDE (P/O ITEM 1)
21	22K44830	RETARD ROLLER (REP 5.6)
22	9E58130	SPRING
23	48E11880	ROLLER HOUSING
24	38E14260	PLASTIC GUIDE
25	130E7340	SDF DOCUMENT GLASS OVERHEAT THERMISTER (RT2)

0	0025	D
ALB	PL00	X 0

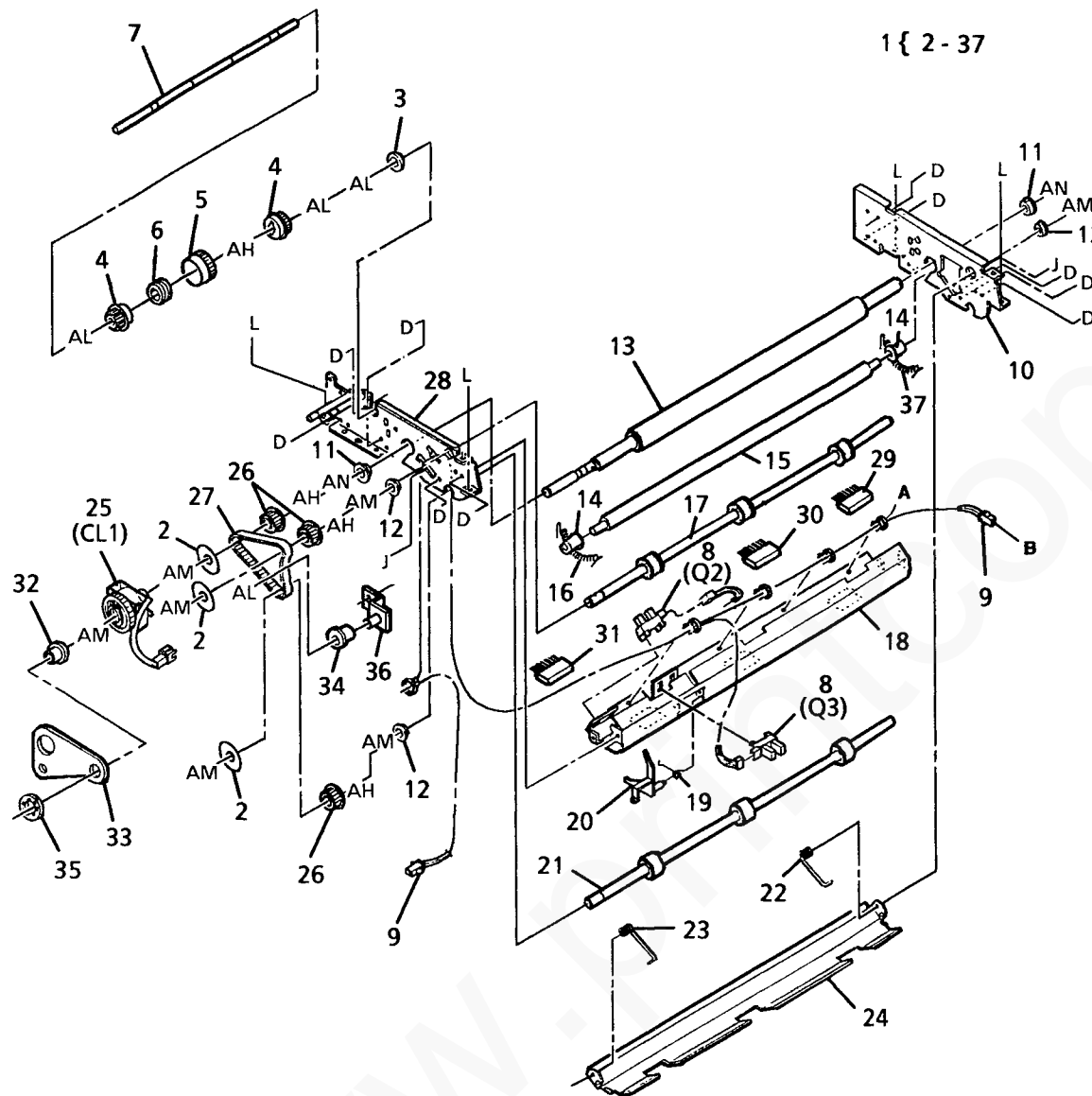
PL 8.3 SDF (3 OF 4)



ITEM	PART	DESCRIPTION
1	--	SDF DRIVES (P/O ITEM 1, PL8.1)
2	7E38220	GEAR
3	23E11560	DRIVE BELT
4	28E10220	WASHER
5	127K13180	SDF DRIVE MOTOR (MOT 2) (REP 5.4)
6	7E29910	GEAR (28T)
7	7E29890	GEAR (16T)
8	13E9750	BEARING
9	6E42920	SDF DRIVE SHAFT
10	49E13860	DRIVE SUPPORT
11	20E22910	IDLER PULLEY
12	20E20720	PULLEY (40T)
13	7E14840	GEAR (20T)
14	8E4910	SDF NUDGER CLUTCH GEAR
15	162K2250	SDF HARNESS
16	5E9620	SDF NUDGER CLUTCH CAM (REP 5.7)
17	16E9690	CLUTCH SLEEVE
18	9E58100	CLUTCH SPRING
19	121E10200	SDF NUDGER SOLENOID (SOL 1) (REP 5.9)
20	160K11280	ENCODER SENSOR PWB (Q15)

0	0026	C
ALB	PL00	X 0

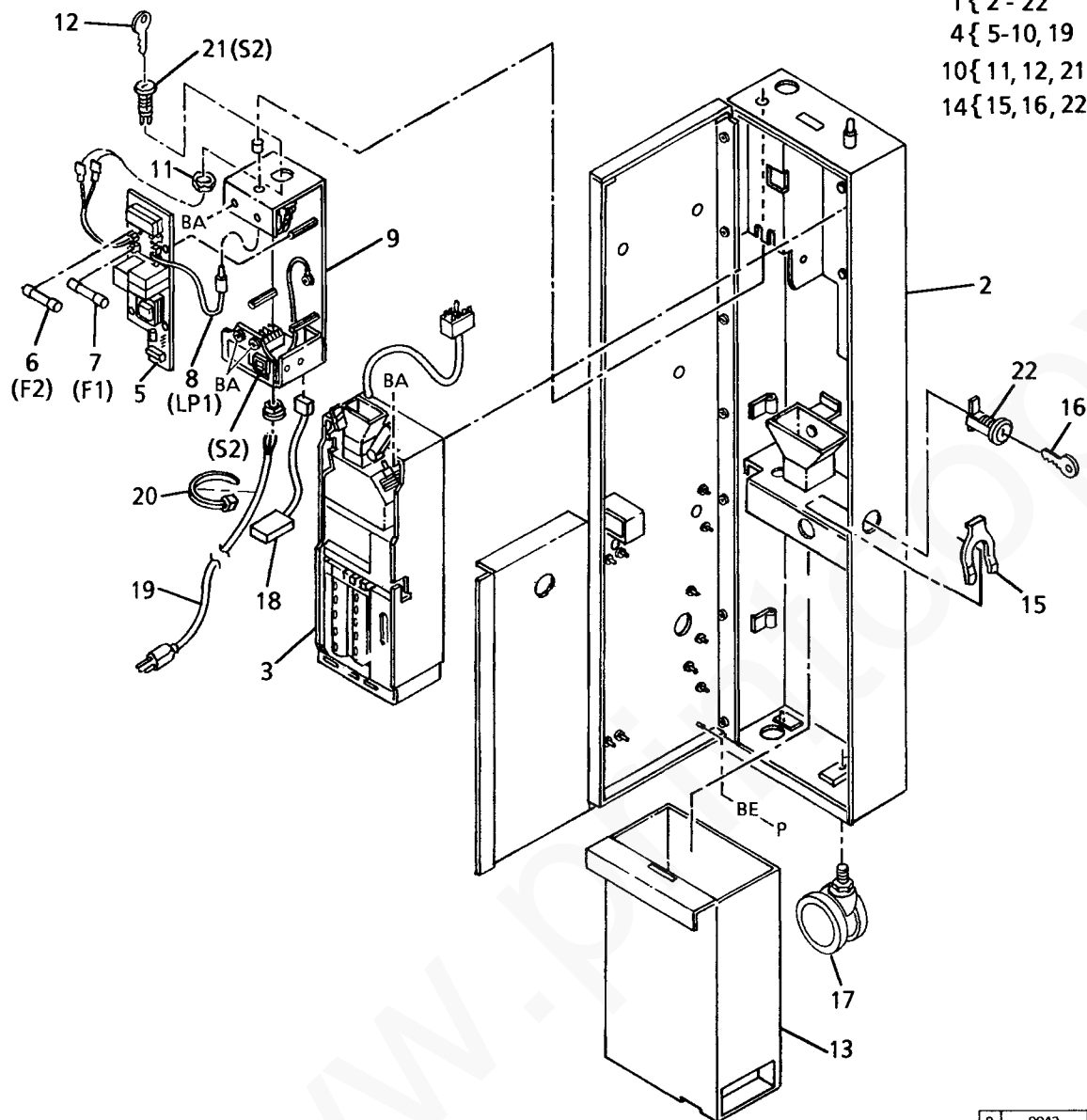
PL 8.4 SDF (4 OF 4)



ITEM	PART	DESCRIPTION
1	--	SDF FEEDER ASSEMBLY (P/O ITEM 1, PL8.2) (REP 5.5)
2	28E10220	WASHER
3	13E9770	BEARING
4	8E4910	FEED CLUTCH
5	5E9640	CLUTCH COLLAR
6	9E58140	CLUTCH SPRING
7	6E42940	FEED SHAFT
8	107E7470	REGISTRATION SENSOR (Q2), SDF EXIT SENSOR (Q3)
9	162K2250	SDF HARNESS
10	--	SDF FRONT FRAME (P/O ITEM 1)
11	13E10120	BEARING
12	13E11170	BEARING
13	22E15410	SDF REGISTRATION ROLL
14	13E9820	BEARING
15	22E15400	SDF REGISTRATION PINCH ROLL
16	9E58160	SPRING (REAR)
17	22E15420	EXIT ROLLER
18	--	TURN GUIDE (P/O ITEM 1)
19	9E58180	ACTUATOR RETURN SPRING
20	120E8460	EXIT SENSOR ACTUATOR
21	22E15430	SDF TAKEAWAY ROLL
22	9E58190	FRONT SPRING
23	9E58170	REAR SPRING
24	38E13770	GUIDE
25	5K3550	SDF REGISTRATION CLUTCH (CL1) (REP 5.8)
26	20E20740	PULLEY (22T)
27	23E11570	TRANSPORT BELT
28	--	SDF REAR FRAME (P/O ITEM 1)
29	125E2030	STATIC BRUSH (FRONT)
30	125E2040	STATIC BRUSH (CENTER)
31	125E2050	STATIC BRUSH (REAR)
32	13E10590	BEARING
33	15E45310	PLATE
34	20E25460	TENSION PULLEY
35	120E11010	RETAINER
36	15K21180	TENSION BRACKET
37	9E73990	SPRING (FRONT)

0	0027	F
ALB	PL00	X 0

PL 9.1 COIN-OP

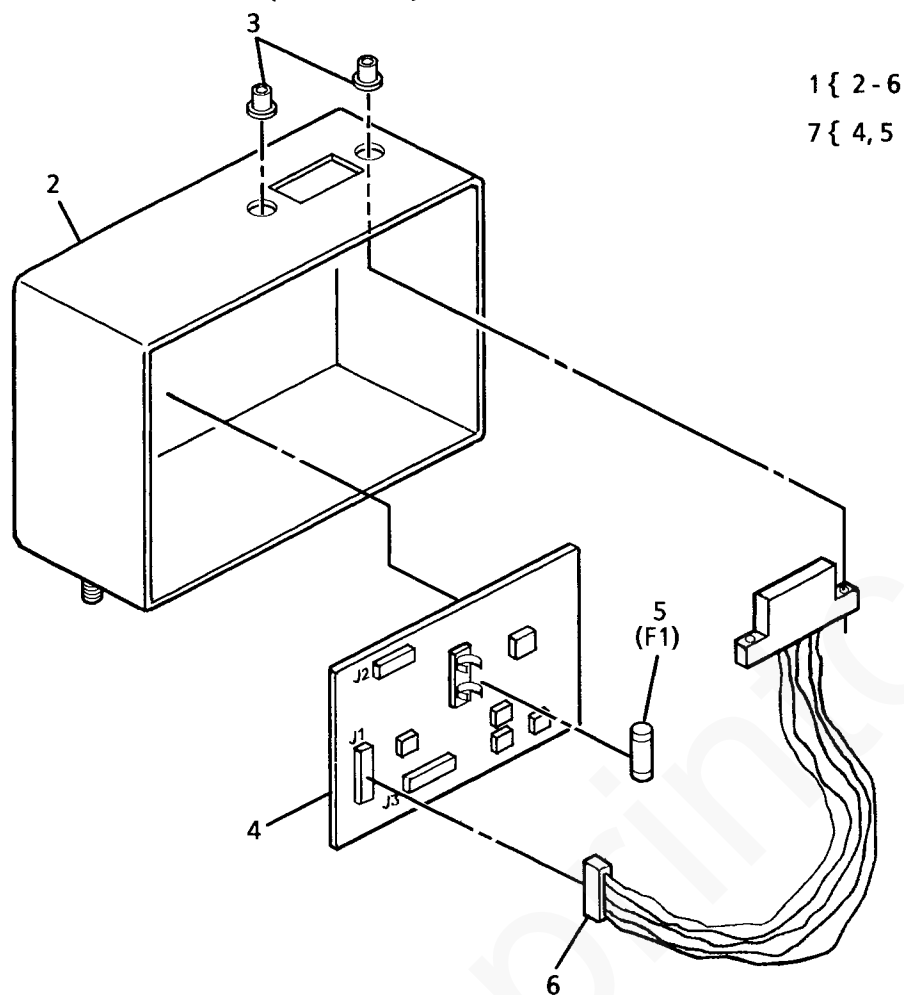


1 { 2 - 22
4 { 5-10, 19
10 { 11, 12, 21
14 { 15, 16, 22

ITEM	PART	DESCRIPTION
1	--	COIN-OP KIT (TO ORDER, CONTACT SALES REP)
2	--	FRAME (P/O ITEM 1)
3	84K790	COIN CHANGER (US/XCL/XLA)
-	98K27600	COPY TRON (RX)(CONTACT SALES)
4	101E7090	CONTROL MODULE ASSEM- BLY
5	--	CONTROL PWB (P/O ITEM 4)
6	708W2501	FUSE (1/10A,120V)(F2)
7	708W4001	FUSE (1A,120V)(F1)
8	122E1280	CORRECT CHANGE LAMP (LP1)
9	--	CONTROL MODULE FRAME (P/O ITEM 4)
10	110E4160	BYPASS SWITCH ASSEMBLY (S2)
11	--	LOCK NUT (P/O ITEM 10)
12	--	KEYS (QTY 2) (P/O ITEM 10)
13	60E490	COIN BOX
14	3E17000	LOCK ASSEMBLY
15	--	SPRING CLIP (P/O ITEM 14)
16	--	KEYS (QTY 2) (P/O ITEM 14)
17	17E3730	SWIVEL CASTER
18	--	INTERFACE CABLE (NOT SPARED)
19	--	POWER CORD (P/O ITEM 4)
20	420W20101	CABLE TIE
21	--	BYPASS SWITCH (P/O ITEM 10)
22	--	LOCK (P/O ITEM 14)

0	0042	A
ALB	PL	X 0

PL 9.2 FOREIGN INTERFACE (TAG P-049)



ITEM	PART	DESCRIPTION
1	--	FOREIGN INTERFACE KIT (FOR KIT SEE SALES REP)
2	--	CHASSIS (P/O ITEM 1)
3	26P80362	CONNECTOR MOUNTING KIT
4	--	PWB (P/O ITEM 7)
5	108E3150	FUSE (F1)(.1A)
6	162K6170	HARNESS
7	160K4820	FOREIGN INTERFACE PWB ASSEMBLY

0	0043	A
ALB	SD	X 0

ITEM	PART	DESCRIPTION
A	112W27651	SCREW (M3X6)
B	112W36451	SCREW (M4X12)
C	113W27451	SCREW (M3X4)
D	113W27551	SCREW (M3X4)
E	113W27651	SCREW (M3X6)
F	113W27851	SCREW (M3X8)
G	113W28051	SCREW (M3X10)
H	113W28251	SCREW (M3X6)
J	113W28451	SCREW (M3X14)
K	113W28651	SCREW
L	113W35651	SCREW (M4X6)
M	113W35657	SCREW (M4X6)
N	113W35851	SCREW (M4X8)
P	113W36051	SCREW (M4X10)
R	113W36251	SCREW (M4X12)
S	113W36451	SCREW (M4X14)
T	153W27650	SCREW (M3X6)
U	153W27850	SCREW (M3X8)
V	153W28050	SCREW (M3X10)
W	153W28250	SCREW (M3X8)
X	153W28850	SCREW (M3X8)
Y	153W35850	SCREW (M4X8)
Z	153W36050	SCREW (M4X10)
AB	153W42353	SCREW (M4X12)
AC	158W35855	SCREW (M4X10)
AD	220W20450	NUT (M4)
AE	251W21151	WASHER
AF	251W21251	WASHER (M3)
AG	251W24451	WASHER (M4)
AH	271W16050	DOWEL PIN (2X8)
AJ	271W28050	DOWEL PIN (3X10)
AK	354W21251	E-RING (3MM)
AL	354W24251	E-RING (4MM)
AM	354W26251	E-RING (6MM)
AN	354W28251	E-RING (8MM)
AP	354W30251	E-RING (10MM)
AR	356W26251	GRIP RING (5MM)
AS	356W27251	GRIP RING (5MM)
AT	356W29251	GRIP RING (8MM)
AU	141W35651	SET SCREW
AV	251W24251	WASHER
AW	113W28851	SCREW
AX	259W24250	SCREW

<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>
3E17000	9.1	7E29570	8.2	9E57720	4.9	10E3550	4.10A	17E3730	9.1	22E16490	6.2
3E27150	4.1	7E29580	4.5	9E57760	6.1	10E3560	8.1	19E23730	3.2A	22E16560	4.10A
3E27150	4.3	7E29580	4.9	9E57770	6.1	12K3290	3.1A	19E23730	3.4	22E18270	4.9
3E27170	3.3	7E29590	2.3	9E57780	6.1	12E6960	3.2B	19E23730	3.5	22E18270	8.2
3E27170	3.4	7E29600	2.3	9E57820	1.2	12E6970	4.10B	19E26700	3.4	22E18280	4.6
3E27200	7.2	7E29610	2.3	9E57830	4.12	12E7020	8.2	19E26710	3.2B	22E18280	4.7
3E27210	4.8	7E29620	2.3	9E57840	4.8	12E7550	4.10B	19E26710	4.6	22E18440	6.2
3E27220	4.8	7E29630	2.1	9E57850	4.8	13E9660	4.9	19E26710	4.7	22K37780	4.9
3E27230	4.8	7E29630	2.3	9E57860	2.1	13E9680	6.1	19E26740	4.10B	22K37850	4.9
3E27240	1.1	7E29650	6.1	9E57900	6.2	13E9690	5.3	19E26790	6.1	22K37860	5.3
3E27250	1.1	7E29660	4.9	9E57910	6.2	13E9700	5.3	19E26820	6.2	22K37870	6.2
3E32930	4.1	7E29710	2.1	9E57920	2.2	13E9710	5.3	19E26830	4.4	22K37920	4.5
3E32930	4.3	7E29720	2.1	9E57920	4.11	13E9720	6.2	19E26830	4.11	22K40640	8.1
3E32940	4.8	7E29730	2.1	9E57960	4.6	13E9740	4.4	19E26890	2.2	22K40670	4.5
3E33060	8.1	7E29740	5.3	9E58010	5.6	13E9740	4.6	19E26900	3.3	22K40710	4.7
3E34280	3.5	7E29750	5.3	9E58080	8.2	13E9740	4.7	19E27030	4.10A	22K41690	8.2
4K870	7.1	7E29760	5.3	9E58100	8.3	13E9740	4.11	19E27130	4.3	22K44830	8.2
4E6270	8.1	7E29770	5.3	9E58130	8.2	13E9750	3.1B	19E27520	4.1	22K45150	4.4
4E8450	3.4	7E29780	6.2	9E58140	8.4	13E9750	4.5	19E27630	8.2	22K45150	4.11
4E8560	4.3	7E29790	2.2	9E58150	8.2	13E9750	4.7	19E29080	2.3	23E11530	4.11
4E8560	4.6	7E29790	4.2	9E58160	8.4	13E9750	4.11	19E29210	4.5	23E11540	4.6
4E8620	3.3	7E29790	4.4	9E58170	8.4	13E9750	8.3	19E29220	1.3	23E11540	4.7
4E8630	3.1A	7E29790	4.5	9E58180	8.4	13E9760	6.2	19E29380	3.2A	23E11560	8.3
4E8670	3.2A	7E29790	4.11	9E58190	8.4	13E9770	8.2	19E29390	3.2A	23E11570	8.4
4E8740	4.9	7E29810	2.2	9E58200	3.2B	13E9770	8.4	19E29400	4.7	23E12090	6.2
5K3550	8.4	7E29830	2.2	9E63260	7.2	13E9790	3.1B	19E29410	4.7	23E13460	4.6
5K3580	4.11	7E29840	2.2	9E63270	1.2	13E9820	8.4	19E29570	3.2B	26E39070	3.2A
5E9590	4.9	7E29870	4.5	9E63280	4.3	13E9920	2.3	20E20690	4.11	26E39210	2.1
5E9610	4.6	7E29870	4.7	9E63680	5.2B	13E10120	4.1	20E20700	4.6	26E39220	1.2
5E9610	4.7	7E29880	4.5	9E63690	4.11	13E10120	4.7	20E20710	4.6	26E39270	5.4
5E9620	8.3	7E29880	4.7	9E63710	4.4	13E10120	8.4	20E20710	4.7	26E43640	1.3
5E9640	8.4	7E29890	8.3	9E63720	4.4	13E10300	6.1	20E20720	8.3	26E43660	3.4
5E10360	4.10A	7E29910	8.3	9E66360	3.1A	13E10310	6.2	20E20740	8.4	26E43670	3.3
5E10510	3.1B	7E29970	5.4	9E66370	2.1	13E10320	6.2	20E22910	8.3	26E43680	1.3
6K13990	3.1A	7E29980	5.4	9E66380	3.1B	13E10590	8.4	20E23360	1.2	26E43680	2.2
6E42840	4.9	7E29990	5.4	9E66430	4.11	13E11170	8.4	20E25460	8.4	26E43680	4.1
6E42850	4.9	7E30010	5.4	9E66440	4.11	14E27170	6.1	22E15280	4.9	26E43680	4.3
6E42870	4.8	7E30020	5.4	9E66450	2.2	14E27180	6.1	22E15280	8.2	26E43680	4.5
6E42880	2.1	7E33880	4.1	9E66490	6.1	14E27200	5.3	22E15300	4.4	26E43680	4.11
6E42920	8.3	7E34040	4.2	9E66510	4.4	14E27900	5.3	22E15310	6.1	26E43680	6.2
6E42940	8.4	7E34060	4.2	9E66720	4.10A	15K21180	8.4	22E15320	6.1	26E43700	6.1
6E42950	5.4	7E34120	4.4	9E66730	4.6	15E40530	3.5	22E15330	4.12	26E43990	3.2A
6E45820	4.1	7E34130	5.4	9E67170	4.1	15E40580	5.3	22E15340	6.2	26E44000	3.2A
6E46030	6.2	7E34140	5.4	9E67330	3.1A	15E44330	4.1	22E15360	4.6	26E44020	1.2
6E47560	6.2	7E34520	5.3	9E69560	5.2B	15E45220	5.2B	22E15370	4.6	26E44030	4.10A
6E47750	4.10A	7E38220	8.3	9E69610	4.6	15E45240	6.2	22E15380	4.6	26E44030	5.5
6E51530	4.6	8E4910	8.3	9E69860	4.6	15E45300	5.3	22E15380	4.7	26E44040	4.12
6E51530	4.7	8E4910	8.4	9E69860	4.7	15E45310	8.4	22E15400	8.4	26E44300	4.8
6E51860	4.6	9E17190	4.9	9E69870	4.6	15E47600	1.1	22E15410	8.4	26E44310	5.2A
7E11310	2.2	9E32760	7.2	9E69870	4.7	16E9670	4.9	22E15420	8.4	26E44320	6.2
7E14840	4.9	9E57090	4.10A	9E70250	4.4	16E9690	8.3	22E15430	8.4	26E44330	4.4
7E14840	8.2	9E57670	3.2B	9E70250	4.11	16E10340	1.2	22E15540	4.11	26E44340	5.4
7E14840	8.3	9E57690	4.9	9E70260	4.5	17K590	7.3	22E15730	7.2	26E46000	2.1
7E29550	3.1B	9E57700	4.9	9E73990	8.4	17K600	7.3	22E15890	4.7	26E46010	3.2A
7E29570	4.9										

<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>
26E46020	3.1B	35E31540	5.2A	48E4380	7.1	53E4610	8.1	108E3110	3.3	125E2040	8.4
26E46030	3.1B	35E31550	5.2A	48E4470	8.1	54E4760	3.1B	108E3150	9.2	125E2050	8.4
26E46040	3.1A	35E31560	5.2A	48E10970	4.1	54E4930	3.1A	109R269	7.2	125K2060	5.6
26E46060	5.2B	35E31570	5.2A	48E10980	3.1A	54E4940	3.1A	110E2780	1.2	126K4220	6.1
26E46100	5.4	35E31580	5.2A	48E11870	8.2	54E5070	3.1A	110E4160	9.1	126K4230	6.1
26E46110	4.4	35E33840	5.3	48E11880	8.2	55E28370	3.2B	110E6350	1.2	126K4770	3.2A
26E46130	4.4	36K810	7.1	48E12020	4.4	55E28380	3.2B	110E6360	1.2	126K4780	3.2A
26E46160	7.3	36K820	7.1	48E12030	4.4	55E28430	1.3	110E6370	1.2	127E9120	1.2
26E46170	7.3	36K1020	8.1	48E16620	7.2	55E28440	1.3	110E6380	8.1	127E9130	5.4
26E48410	7.2	36K1090	8.1	48E16710	1.2	55E31290	3.2B	110E6750	3.1B	127E9360	3.1A
26E48460	5.5	38E13530	4.3	48E17000	2.1	55E31750	3.1B	113R79	5.5	127E9390	4.2
26E49130	7.1	38E13540	4.3	48E17010	5.5	55E31820	1.3	113R80	5.5	127K13140	3.1B
26E52950	7.2	38E13580	4.10A	48E17020	5.6	55E31880	3.2B	113R81	5.5	127K13150	3.2A
26E54140	7.2	38E13600	4.10A	48K18890	7.3	55E31890	3.2B	113R82	5.5	127K13170	2.3
26E54150	7.2	38E13610	4.10B	48K19190	5.2A	60E490	9.1	113R85	5.5	127K13180	8.3
26E54360	3.1B	38E13620	4.10B	48E20410	5.5	62E7100	3.2A	113R86	5.5	127K14220	4.2
26P80362	9.2	38E13640	6.1	48E30720	7.2	62E7110	3.4	115E4440	6.1	127K17150	3.1B
28E10220	8.3	38E13650	4.12	48K43010	5.4	62E7120	3.4	115E4480	6.1	128E480	7.2
28E10220	8.4	38E13670	6.2	49E13440	3.2A	62E7140	3.5	115E4490	6.1	130E6650	3.1A
28E10530	4.11	38E13720	8.1	49E13520	3.1A	62E7150	3.5	115E4500	6.1	130E6660	6.1
28E10670	4.6	38E13730	8.1	49E13530	4.9	62E7170	3.3	115E4510	6.1	130E6670	6.1
28E10670	4.7	38E13770	8.4	49E13540	4.9	62E7590	7.2	116E6670	1.3	130E6680	5.2A
28E10680	2.1	38E14180	4.1	49E13680	1.2	62E7600	7.2	117K22310	1.3	130E6690	2.2
28E10700	2.2	38E14190	4.1	49E13720	4.12	84K790	9.1	120E8390	6.1	130E6690	3.2A
28E10840	3.4	38E14260	8.2	49E13750	2.1	90E1700	7.2	120E8430	4.6	130E6690	4.2
28E10850	5.4	38E14540	4.11	49E13770	3.1B	90E1880	7.2	120E8440	8.2	130E6690	4.4
28E10860	5.4	38E14550	4.11	49E13780	3.1B	94K2940	5.4	120E8450	8.2	130E7000	4.7
29E19270	4.6	38E14630	4.10A	49E13800	1.1	96E20690	6.1	120E8460	8.4	130E7340	8.2
29E19270	4.7	38E14640	4.10A	49E13820	4.4	96E20740	1.1	120E10290	5.2B	130K54030	4.5
30K52780	3.4	38E14650	4.10A	49E13820	4.11	96E20750	1.1	120E10320	4.4	130K54060	4.5
30K52790	3.5	38E14670	4.10A	49E13830	1.3	96E25890	7.2	120E10520	4.1	160K1570	3.1A
30K52800	3.5	38E14680	4.10A	49E13850	4.6	96E25910	7.2	120E10530	4.5	160K1600	4.10B
31E6930	4.9	38E15330	4.10A	49E13850	4.7	96E25920	7.2	120E10560	1.3	160K1610	5.5
31E6940	4.10B	38E15340	4.10A	49E13860	8.3	96E25930	7.2	120E10880	3.1A	160K1640	1.1
31E6950	4.5	38E15480	4.6	49E13900	8.2	96E25990	1.1	120E10890	3.2A	160K1650	1.3
31E6950	4.11	38E15480	4.7	49E31340	5.2B	96E26010	1.1	120E10900	3.2A	160K1660	1.3
31E6960	2.2	38E15540	6.1	49E35640	4.5	96E26990	8.1	120E11010	8.4	160K1670	1.3
31E6970	2.2	41K4540	3.3	49E35800	4.4	96E43620	1.1	121K8780	4.5	160K1720	8.1
31E6990	4.6	41K4550	3.3	49E39570	1.1	96E50040	7.2	121K8780	4.7	160K1730	1.2
31E6990	4.7	48E4010	3.1A	49E39900	1.1	96E52290	1.1	121K8790	2.3	160K1740	1.2
31E7010	8.2	48E4100	7.2	49E42940	4.6	96E62490	7.2	121E10130	4.9	160K4820	9.2
31E7280	5.2B	48E4110	7.2	49E48230	5.5	96E67170	1.1	121E10140	4.10A	160K8220	5.5
31E7290	4.4	48E4120	7.2	50E10420	7.2	96E67180	1.1	121E10170	2.1	160K8320	1.1
31E7300	4.2	48E4130	7.2	50E10430	4.10B	96E67190	1.1	121E10200	8.3	160K8330	1.1
32E7450	3.1B	48E4140	7.2	50E10500	8.1	96E67440	7.2	121E10500	7.2	160K8340	1.3
32E7460	3.4	48E4150	7.2	50E10520	8.2	98K27600	9.1	121E10910	4.4	160K8350	8.1
32E7470	4.12	48E4160	7.2	50E11210	8.1	101E7090	9.1	121E10960	7.1	160K11280	8.3
32E7700	3.1B	48E4170	7.2	50K21160	4.1	105K10360	1.3	122E1280	9.1	160K13990	1.2
33K2380	6.1	48E4190	4.9	50K21220	4.10B	105K10400	1.3	122K1450	6.1	160K14190	1.1
35E25930	5.3	48E4200	4.10B	50K22430	5.2A	105K10420	1.3	122K1490	6.1	162K2030	3.2A
35E25940	5.2A	48E4240	6.1	50K22820	4.3	107E7470	4.4	122K1500	5.5	162K2040	3.3
35E25950	5.2A	48E4310	5.2A	50K25650	4.3	107E7470	4.5	122E1810	3.3	162K2050	4.8
35E25960	5.3	48E4350	1.1	52E10100	6.1	107E7470	8.2	122E1820	3.3	162K2070	2.1
35E26040	5.4	48E4370	7.1	53E4140	1.2	107E7470	8.4	125E2030	8.4	162K2140	2.1

<u>PART NUMBER</u>	<u>PL LOC.</u>
162K2150	2.1
162K2160	2.1
162K2220	4.5
162K2240	8.1
162K2250	8.2
162K2250	8.3
162K2250	8.4
162K2260	2.2
162K2300	1.3
162K6170	9.2
162K7770	3.2A
162K8310	4.7
162K8320	4.4
162K11070	4.5
162K11080	1.2
162K11090	1.3
162K14130	1.2
420W20101	9.1
502S64233	5.2A
600S7514	4.11
600K46290	5.6
600K50430	6.2
600K53110	5.4
600K56760	3.3
605K7880	8.1
606K5610	8.1
708W2501	9.1
708W4001	9.1

6. GENERAL PROCEDURES / INFORMATION

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DIAGNOSTICS

ENTERING THE DIAGNOSTIC MODE

1. Ensure that the Front Cover is closed, or that the Interlock Switch is cheated.
2. Switch off the copier.
3. Press and hold down the **0** button and then switch on the copier. Release the **0** button.

The copier is in the diagnostic mode, and a diagnostic code can be entered. All the lamps on the control panel should be illuminated at this time. After entering the diagnostic mode, press and release the **Start** button to switch off the Control Panel lamps if desired.

The lamps for the copier diagram are used to indicate the actuation and deactuation of Input Components. Other codes use other lamps for indicating selections and conditions. After entering the diagnostic mode, always ensure that all the lamps are illuminated, or a false indication will occur.

EXITING THE DIAGNOSTIC MODE

Use one of the following methods.

- Switch off the copier and then switch on the copier.
- Remove the interlock switch cheater and then install the interlock switch cheater.
- Open the Front Cover and then close the Front Cover.

ENTERING A DIAGNOSTIC CODE

1. Enter the diagnostic mode.
2. Enter the one or two digits of the diagnostic code that are to the left of the dash.
3. Press the **Start** button.
4. Enter the one or two digits of the diagnostic code that are to the right of the dash.
5. Press the **Start** button to enable an input component to be checked, energize an output component, or begin any of the other diagnostic routines.

CLEARING A DIAGNOSTIC CODE

Except Adjustment Codes, all the other codes are cleared by pressing the **Stop/Clear** button twice and then pressing the **Zero** button twice. The display becomes blank, and another diagnostic code can be entered at this time. Adjustment Codes cannot be cleared without exiting the diagnostic mode.

RESET CODES

Reset codes are used to initiate diagnostic actions when specific status codes are displayed.

Code	Description
20 – 52	Fuser Overtemperature or Undertemperature status code clearance
20 – 96	Control Logic Memory reset

SECONDARY STATUS CODE

Press the **Stop** button to display a secondary status code.

INPUT COMPONENT CODES

An Input Component Code is entered to check the operation of a sensor or a switch. Enter the code for the component. Manually actuate the component while observing the appropriate lamp on the Control Panel. Testing input components requires that the lamps on the Control Console function correctly.

Code	Input Component	
	Component	Control Panel Lamp
2 – 2	Control Panel buttons (except the Stop/Clear button)	Display Window LED
5 – 1	SDF Interlock Switch	SDF Jam
5 – 1	SDF Document Present Sensor	Dry Ink
5 – 1	SDF Registration Sensor	Copier Jam
5 – 1	SDF Exit Sensor	CRU
6 – 2	Lens Home Sensor	Dry Ink
6 – 2	Carriage Home Sensor	CRU
6 – 6	Document Cover Open Switch	CRU

Code	Input Component	
	Component	Control Panel Lamp
7 – 1	Tray 1 Position Sensor (500 sheet)	Tray 1
7 – 1	Tray 1 Empty Sensor	Tray 1 (Tray 1 250) Tray 2 (Tray 1 500)
7 – 1	Paper Size Sensor	Dry Ink
7 – 1	Paper Feed Sensor	Copier Jam
7 – 1	Exit Sensor	CRU
7 – 2	Tray 2 Jam Sensor	Copier Jam
7 – 2	Tray 2 Empty Sensor	Tray 1
7 – 2	Transport Open Sensor	Dry Ink

OUTPUT COMPONENT CODES

An Output Component Code is entered to check the operation of an output component such as a clutch or a motor.

Code	Output Component
2 – 1	Control Panel Lamps All lamps light for five seconds
4 – 1	Main Drive Motor
4 – 1	Dry Ink Sensor output to Control Panel display in Hex
5 – 2	SDF Drive Motor
5 – 3	SDF Nudger Solenoid
5 – 4	SDF Registration Clutch
5 – 5	Optics Cooling Fan (SDF)
6 – 1	Scan Drive Motor (1 scan)
6 – 3	Lens Drive Motor (1 R/E cycle)
6 – 4	Exposure Lamp/Optics Cooling Fan (on for 3 seconds)
8 – 1	Stripper Finger Solenoid (cycle for 3 seconds)
8 – 2	Tray 1 Lift Motor (500 sheet tray only)
8 – 3	Tray 2 Feed Clutch

Code	Output Component
8 – 4	Bypass Feed Solenoid (on for 5 seconds)
8 – 5	Bypass Nudger Solenoid (on for 3 seconds)
8 – 6	Feed / Transport Clutch
8 – 7	Tray 1 Feed Clutch
8 – 8	Registration Clutch (on for 3 seconds)
9 – 2	Charge Corotron Transfer Corotron
9 – 5	Detack Corotron
9 – 6	Discharge Lamp
9 – 7	Edge Erase Lamp
9 – 8	Dry Ink Motor (Do not energize with Dry Ink cartridge installed)
10 – 1	Fuser Heat Rod (cycles for 3 seconds)
10 – 2	Fuser Cooling Fans (on for 3 seconds)

COPIER COUNTER DATA CODES

A code is entered to determine the usage on the CRU.

Code	Copier Counter Data
3 – 2	CRU Copies Made (US Only)
3 – 3	CRU Type 4 = 18,000 copies 7 = run to life
3 – 6	Hard Stop Limit 18 = 18,000 copies 64 = 64,000 copies

CONTROL PANEL DISPLAY TEST

Enter the diagnostic mode and all the control panel lamps will illuminate. The component control codes for input components use the lamps that are in the copier diagram to provide feedback. If these lamps are inoperative, false indications will occur.

CONTROL PANEL SWITCH TEST [2 – 2]

Enter [2 – 2]. Press any control panel switch and the numeric display should increase by two digits. The Stop / Clear button is tested when it is used to clear the second digit of a diagnostic code. If the second digit cannot be cleared, the Stop / Clear button is inoperative.

NVM EXAMINE / MODIFY

Code	Function	Range	Default	ADJ	Description
20 - 1	Dry Ink Concentration Ratio	0 to 99	–	–	The setup is automatic, and takes 3-5 minutes. It is used for developer changes only.
20 - 2	Fuser Temperature	75 to 00 00 = 100	90	10.1	The value that is displayed represents the last two digits of the presently set temperature
20 - 3	Lens Identification	00 to 21	11	6.17	The number on the lens tag (for lens characteristics) is stored in this location
20 - 4	Exposure Level Text Photo Auto	Lighter/Darker Lighter/Darker 00 to 99 00 to 99 00 to 99	– – – – –	6.1 6.1 6.1	This location stores a value that correspond to the exposure lamp voltage in the Auto, Normal, and Photo modes.
20 - 5	Auto Exposure Sensor	Hex Code	N/A	–	This program allows the control logic to read relative values via the Auto Exposure Sensor when the Exposure Lamp is energized with several different voltages.
20 - 6	Magnification (Front to Rear)	00 to 99	50	6.2	The position of the lens is adjusted.
20 - 7	Magnification (Lead Edge to Trail Edge)	00 to 99	50	6.2	This location stores a value for Lead Edge to Trail Edge Magnification.
20 - 8	SDF Magnification	00 to 99	50	5.2	This location stores a value for Lead Edge to Trail Edge Magnification (SDF).

NVM EXAMINE / MODIFY

Code	Function	Range	Default	ADJ	Description
20 – 9	Lead Edge Registration 1:1 only w/R/E w/R/E/SDF	00 to 99	0	8.2	This location stores a value for Lead Edge Registration. The on timing of the Registration Clutch is adjusted.
20 – 10	Registration Buckle Tray 1/ 2 Bypass Tray	00 to 99	25 50	8.1	This location stores a value for Registration Buckle. The off timing of the Feed / Transport clutch is adjusted.
20 – 11	Lead/Trail Edge Deletion Lead Edge Trail Edge	00 to 99 00 to 99	50 50	8.3	This location stores a value for Lead Edge Deletion. The timing of the energizing of the charge corotron grid is adjusted.
20 – 12	Metric or Inch Size paper 1:1 R/E Fixed Zoom	01 or 03 53 11 or 13	–	–	This location stores a value for the size of copy paper. 01 = Metric, 03 = Inches 11 = Metric, 13 = Inches
20 – 14	RX and XCL only: CRU Reorder Signal	0 or 1	0	–	This location stores a value to enable or disable the reorder signal. 0 = off, 1 = on
20 – 15	SDF Exposure	00 to 99	–	5.3	This location stores a value to match SDF and Document Glass exposure level.
20 – 16	Tray 1 Size 250 w/w/oSDF 500 w/w/o SDF	00 to 03	–	–	00 = 250 w/o SDF / 01 = 250 w/SDF 02 = 500 w/o SDF / 03 = 500 w/SDF
20 – 17	Xerographic Auto Correct	6 or 16	16	–	Automatic density compensation factor
50 – 01	Foreign Interface Enable	0 or 1	0	–	This location stores a value to enable or disable the Foreign Interface. 0 = Off, 1 = On

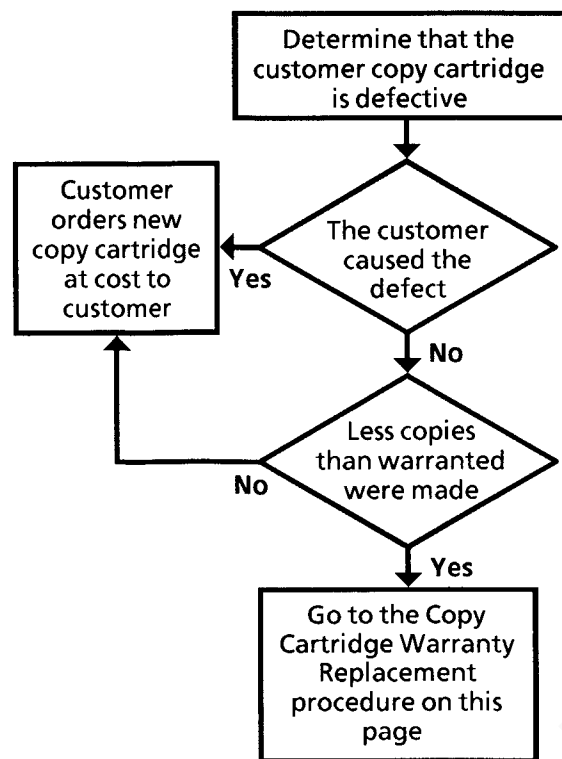
CONFIGURATION CODES

Product Code	Market / Configuration	Diagnostic Codes			
		20 – 12	20 – 15	20 – 16	20 – 17
OKU	USCO, 1:1, 500 Tray 1	03	0	2	6
1KU	USCO, R/E, 500 Tray 1	13	0	2	6
2KU	USCO, R/E, SDF, 500 Tray 1	13	0	3	6
3KU	XCL, 1:1, 500 Tray 1	03	0	2	6
4KU	XCL, R/E, 500 Tray 1	13	0	2	6
5KU	XCL, R/E, SDF, 500 Tray 1	13	0	3	6
6KU	RX, 1:1, 500 Tray 1	01	0	2	6
7KU	RX, R/E, 500 Tray 1	10	0	2	6
8KU	RX, R/E, SDF, 500 Tray 1	10	0	3	6
2KV	Retail, non-RX, R/E, 250 Tray 1	13	0	0	6
3KV	Retail, non-RX, R/E, SDF, 250 Tray 1	13	0	1	6
4KV	RX Retail, R/E, 250 Tray 1	13	0	0	6

COPY CARTRIDGE TYPES [3 – 3]

USCO is type number 4 (16k warranty, 18k copy limit), and RX is type number 7 (run to failure copy limit). Enter [3 – 3] to display the type number.

USCO COPY CARTRIDGE WARRANTY STRATEGY



COPY CARTRIDGE WARRANTY REPLACEMENT [50 – 35]

1. Ensure that the defective copy cartridge is installed.
2. Enter [50 – 35].
3. Press the **Start** button. The letters **Ed** are displayed.
4. Remove the defective copy cartridge.
5. Install a new copy cartridge and close the front cover. The display shows a flashing 35.
6. Press the **Start** button. The letters **Ed** are displayed. If the status code J8 is displayed, the copy cartridge is used.
7. Exit the diagnostic mode.

NOTE: Copy Cartridge warranty period to 16k copies. The maximum copies is 18k copies for USCO. Other markets run to failure.

CUSTOMER PROGRAMMING

NOTE: Pressing the Stop/Clear button twice will cause the default selections to be displayed.

Priority Tray

This feature allows you to identify the paper tray that the copier automatically selects after the following conditions:

- when the power is switched on.
 - when the timeout occurs and a different tray is selected by the operator.
1. Press and hold the **Paper Tray Select** button down for approximately 4 seconds or until the red and yellow lights flash on the Copier Diagram.
 2. Press the **0** button.
 3. Press the **Start** button to display the current program selection. 01, 02, or 03 is displayed.
 4. Press the **1** button to select Tray 1, the **2** button to select Tray 2, or the **3** button to select the Bypass Tray, to overwrite the right digit.
 5. Press the **Start** button to store the selection.
 6. Press the **Paper Tray Select** button to exit the programming mode.

Timeout to Auto Clear

This feature allows you to select the time it takes for the copier to return to the preprogrammed copy mode after a copy cycle is complete.

1. Press and hold the **Paper Tray Select** button down for approximately 4 seconds or until the red and yellow lights flash on the Copier Diagram.
2. Press the **1** button.
3. Press the **Start** button to display the current program selection. 10, 11, 12, 13, or 14 is displayed.
4. Press the **0** button to select no timeout, the **1** button to select 30 seconds, the **2** button to select 60 seconds, the **3** button to select 90 seconds, or the **4** button to select 120 seconds, to overwrite the right digit.
5. Press the **Start** button to store the selection.
6. Press the **Paper Tray Select** button to exit the programming mode.

Timeout to Power Saver

This feature automatically reduces power consumption of the copier if the copier is not used for a period of time.

1. Press and hold the **Paper Tray Select** button down for approximately 4 seconds or until the red and yellow lights flash on the Copier Diagram.
2. Press the **2** button.
3. Press the **Start** button to display the current program selection. 20, 21, 22, 23, or 24 is displayed.
4. Press the **0** to select off, the **1** button to select 4 minutes, the **2** button to select 30 minutes, the **3** button to select 90 minutes, or the **4** button to select 120 minutes, to overwrite the right digit.
5. Press the **Start** button to store the selection.
6. Press the **Paper Tray Select** button to exit the programming mode.

Power Saver Recovery Time

This feature allows you to select the time it takes for the copier to return to the "Ready to copy" condition, from the Power Saver mode.

1. Press and hold the **Paper Tray Select** button down for approximately 4 seconds or until the red and yellow lights flash on the Copier Diagram.
2. Press the **3** button.
3. Press the **Start** button to display the current program selection. 31 or 32 is displayed.
4. Press the **1** button to select 10 seconds, or the **2** button to select 30 seconds, to overwrite the right digit.
5. Press the **Start** button to store the selection.
6. Press the **Paper Tray Select** button to exit the programming mode.

Default Magnification (R/E only)

This feature allows you to automatically make the copies slightly larger, the same size, slightly smaller than the original.

1. Press and hold the **Paper Tray Select** button down for approximately 4 seconds or until the red and yellow lights flash on the Copier Diagram.
2. Press the **4** button.
3. Press the **Start** button to display the current program selection. 41, 42, or 43 is displayed.

4. Press the **1** button to select 100%, the **2** button to select 99%, or the **3** button to select 101%, to overwrite the right digit.
5. Press the **Start** button to store the selection.
6. Press the **Paper Tray Select** button to exit the programming mode.

Default Exposure

This feature allows you to identify the Copy Quality mode that the copier automatically uses, unless a different selection is made by the operator.

1. Press and hold the **Paper Tray Select** button down for approximately 4 seconds or until the red and yellow lights flash on the Copier Diagram.
2. Press the **5** button.
3. Press the **Start** button to display the current program selection. 51 or 52 is displayed.
4. Press the **1** button to select Text, or the **2** button to select Auto, to overwrite the right digit.
5. Press the **Start** button to store the selection.
6. Press the **Paper Tray Select** button to exit the programming mode.

R/E Preset (R/E only)

This feature allows you to set a specific reduction or enlargement setting. You may choose 129% (factory setting), 94% (A4 to 11), 84% (13 to 11) or 89% (13 to A4).

1. Press and hold the **Paper Tray Select** button down for approximately 4 seconds or until the red and yellow lights flash on the Copier Diagram.
2. Press the **6** button.
3. Press the **Start** button to display the current program selection. 60, 61, 62, or 63 is displayed.
4. Press the **0** to select 129% (default), the **1** button to select 94% (A4 to 11), the **2** button to select 84 (13 to 11), or the **3** button to select 89% (13 to A4), to overwrite the right digit.
5. Press the **Start** button to store the selection.
6. Press the **Paper Tray Select** button to exit the programming mode..

COPIER PROCEDURES

GP1 IMAGE ON PHOTORECEPTOR PROCEDURE

NOTE: The area of the document that will be visible on the photoreceptor is approximately a 25 mm wide band that goes from long edge to long edge of the document.

1. Place the copy face up on the Document Glass.
2. Make a copy and open the Front Cover when the top of the number 1 mirror of the exposure lamp carriage is under the area of the document to be checked.
3. Remove the Copy Cartridge and inspect the photoreceptor.
4. Return to the diagnostic procedure for analysis.

GP2 OPTICS/XEROGRAPHICS ISOLATION PROCEDURE

1. Remove the copy cartridge.
2. Fold a sheet of A4 or 8.5 x 11 inch paper several times along the long edge.
3. Block the opening that is between the Discharge Lamp and the Edge Erase Lamp with the folded paper so that the opening is blocked along most of its length (Figure 1).
4. Reinstall the copy cartridge and make a copy.
5. Check the copy. If the problem is visible, a xerographic problem exists. If the problem is not visible, an optics problem exists.
6. Return to the diagnostic procedure for analysis.

GP3 PROCESSOR SKEW ISOLATION PROCEDURE

1. Remove the copy cartridge.
2. Tear off a small piece of paper and fold it so that it measures approximately 25 mm by 25 mm.
3. Block the middle of the opening that is between the Discharge Lamp and the Edge Erase Lamp with the folded piece of paper (Figure 1).
4. Reinstall the copy cartridge and make a copy with the Document Cover or SDF closed.
5. Check the copy. Skew between the black strip and the edge of the copy indicates a paper path problem. No skew between the black strip and the edge of the copy indicates an optics problem.
6. Return to the diagnostic procedure for analysis.

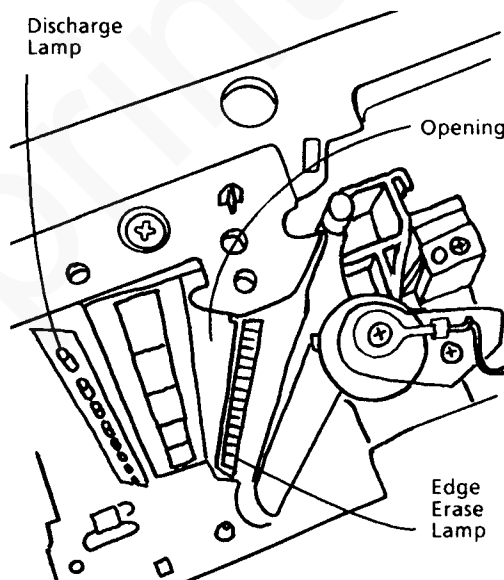


Figure 1. Blocking the Opening

PRODUCT SPECIFICATIONS

SPACE / LEVELING REQUIREMENTS

Overhead clearance requirement is 1981 mm (78 inches) over the area shown as the floor space requirement, shown below (Figure 1).

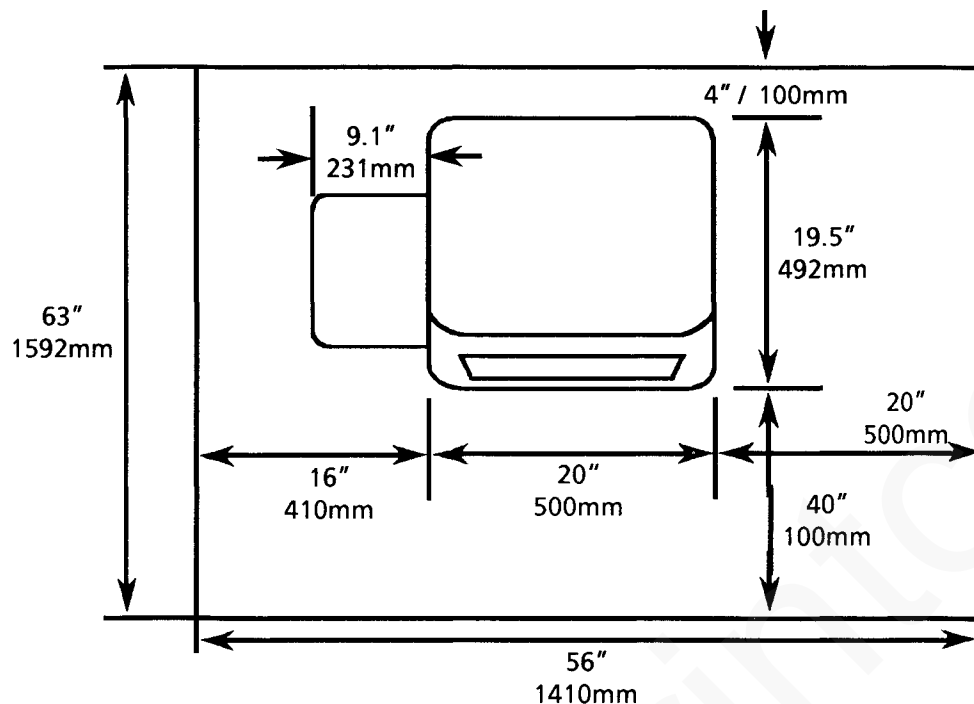


Figure 1. Floor Space Requirement

CAUTION: The copier is sensitive to unlevel mounting surfaces. If the level condition of the surface that supports the copier is unknown, refer to Copier Level (ADJ 1.1)

PHYSICAL CHARACTERISTICS

Height - with Document Cover Weight

Configuration / Component	Height inch / mm
250 Tray 1	12 / 305
500 Tray 1	13.75 / 295
SDF	Add 2.25 / 57
Tray 2	Add 3.5 / 89

Weights are ready to ship. Copier weights include developer, copy cartridge, dry ink cartridge, customer documentation, 50 sheets of paper, and packaging materials.

Configuration / Component(s)	Weight kg/lbs.
5614 1:1	33 / 73
5614 R/E	35 / 77
5614 R/E SDF	37.5 / 83
5113 R/E	34.5 / 76
5114 R/E SDF	37 / 82
Tray 2	4.95 / 11
Copy Cartridge, Dry Ink Cartridge, Developer Cartridge	4.5 / 2.1

CAPABILITIES

Product designations

5113 R/E***

5114 R/E and SDF

5614 1:1

5614 R/E

5614 R/E and SDF

Copying speed

Size of Copy	CPM		
	Closed*** document cover	Open* document cover	SDF** extended run
B4	10/11	5.8	8
8.5 x 14	10/11	5.8	8
A4	13/14	5.8	10
8.5 x 11	13/14	5.8	10
5.5 x 8.5	13/14	5.8	10

* The rate shown occurs with 2 or more copies.

** When feeding more than 20 documents in the SDF, copy speed may slow down so that safe temperatures are maintained on the SDF Document Glass.

*** Early build 5113 will operate at the same speed as 5614. Later production copiers will run at the specified CPM rate.

Warm-Up Time - 30 seconds

First Copy Out - 8 seconds, 8.5" x 11" / A4, Tray 1

PAPER / DOCUMENT SPECIFICATIONS

Paper Tray Capacity:

Tray 1 - 250 or 500 sheets

Tray 2 - 250 sheets

Bypass Tray - 50 sheets

Copy Paper Sizes:

USCO: 10 x 14 inches to 5.5 X 8.5 inches

RX: B4, A4, A5

Copy Paper Weight:

USCO/XCL: 16 to 24 pounds Trays 1 and 2

14 to 110 pounds Bypass

RX: 60 to 80 gm² Trays 1 and 2

52 to 160 gm² Bypass

80 gm² /20 pound minimum for two-sided copying

SDF Document Size:

10 x 14 inches / B4 maximum

Output Tray Capacity:

100 sheets maximum 20 lb. / 80 gm²

ELECTRICAL POWER REQUIREMENTS

USCO: 115 VAC \pm 10%, 60 Hz, single phase
15 AMP service

RX: 220/240 VAC \pm 10%, 50 Hz, single phase

Power Consumption -

725 watts or 6 amps @ 115 VAC with SDF and copier running (maximum)

12 watts with copier switched off

ENVIRONMENTAL DATA

Ambient Temperature and Humidity requirement:

10° C/50°F at 15% humidity

32° C/90°F at 85% humidity

Heat output in BTU/hr.:

2389 copier running

2474 SDF and copier running

358 standby

188 fast recovery power saver

65 slow recovery power saver

41 copier switched off

Sound Level:

40 dBA standby

66 dBA copier running

GFI

The electrical design of the copier makes a ground fault interrupter unnecessary.

SUPPLEMENTAL TOOLS AND SUPPLIES

TOOLS

Test Pattern	RX - 82P523 USCO/XCL - 82P524 82P284
Black Bag	95P2362
Formula A	RX - 8R90175 USCO/XCL - 43P48
All Purpose Cleaner	RX - 8R90175
Lint-Free Cloth	RX/USCO/XCL - 600S4372
Lens and Mirror Cleaner	RX - 8R901784 USCO/XCL - 3P81
Film Remover	USCO/XCL - 43P45
Grease	RX - 600T90429 USCO/XCL - 70P53
Oil	RX - 70P95* USCO/XCL - 70P23*
General Cleaning Solvent	RX - 8R90176 USCO - 43P78
Antistatic Fluid	8R90273

* Do not use LO17 on drive gears. Do not use 70P23/95 on the developer housing parts or the Copy Cartridge.

CAUTION: Do not use Kynar on the Photoreceptor.

Heavy-Duty Towels	USCO/XCL - 35P3191
Cleaning Cloth	RX - 8R90019
Cotton Pad	RX/USCO/XCL - 19P580 600T41107
1.5 mm hex wrench	
Star point screwdriver	600T41300

SUPPLIES

Developer	PL 5.2A
Dry Ink Cartridge*	
RX Direct	6R90223
RX Retail	6R90290
Other Direct	6R752
Other Retail	6R751

Copy Cartridge** PL 5.5

NOTES:

* Store at 41° to 113°F (5° to 45°C), 85% relative humidity.

** Store at 41° to 122° F (5° to 50°C), 85% relative humidity.

GENERAL SERVICE NOTES

5614 5113/5114 DRY INK CARTRIDGE YIELD

The expected dry ink cartridge yield of 4,000 copies is based on an average area coverage of 6 percent per 8.5 X 11 copy. However, yield varies with area coverage of customer documents, document size, copy lighter and copy darker setting, and percent of copies made with the document cover open. Therefore, the 4,000 copies yield cannot be guaranteed.

It is important to understand that some of the customer documents are greater than 6% area coverage.

The 4000 copy yield applies only when these conditions are met:

- Copies made with the copy lighter/darker control set at its normal (middle) position
- Document cover is closed
- Size of the document is A4 or 8.5 x 11

Any document which contains more area coverage than the samples that are represented in Figures 1 and 2, will result in a yield of less than 4,000 copies. Figures 3 and 4 on the next page show examples of area coverages that exceed 6%.

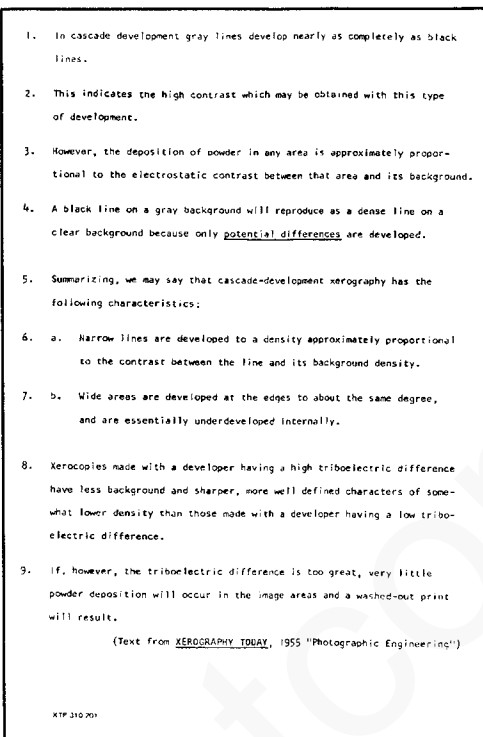


Figure 1. Area Coverage - 3%

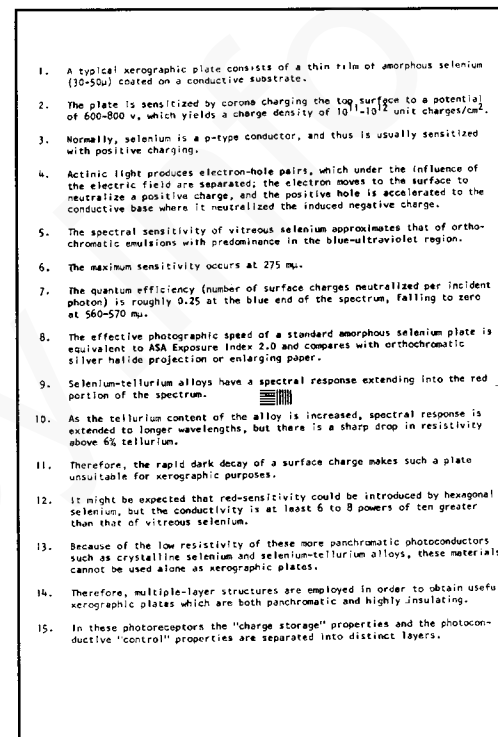


Figure 2. Area Coverage - 6%

- GETTY IMAGES OUTLINE

GETTY IMAGES OUTLINE



(Downloaded from <http://ajph.org/> on August 1, 2015)

MANUFACTURING ADJUSTMENTS

Several optics adjustments and a fuser adjustment are made during the manufacturing process with setup tools. The adjustments are secured with screws that are colored red, or a drop of adhesive or similar material is applied to the screw head and adjacent surface. Do not loosen these screws. Service of these adjustments is not required during the life of the copier.

MULTIPLEXING CIRCUITS

The copier is equipped with multiplexing circuits that use a single wire to feed signals from two or more sensors to a single port in the control logic. At the output of the sensor, the Low voltage level is approximately 0 VDC and the Hi voltage level is approximately +5 VDC. However, after the signals are combined through diodes with additional circuitry into one wire, the voltage levels change. A low voltage level or a high voltage level may be +4.3 VDC. A 0.5 VDC change in voltage level when the sensor is actuated is the indication the sensor is operating.

OZONE FILTER

The Ozone Filter is designed for the life of the copier. If the customer calls for smells, and no other problems are found, replace the Ozone Filter (PL1.2).

DEVELOPER HOUSING GUIDE PIN

On copiers without Tag 2, some Developer Assemblies may not move close enough to the Photoreceptor when the Dry Ink Cartridge is pivoted to the operating position. This may cause light copies, blank copies, uneven density, or J1 faults. This is caused in two ways. Either the Green Panel is not used to move the Dry Ink Cartridge to the operating position, or the plastic molded end cap of the Developer Assembly is not within tolerance. Perform the following procedure to eliminate this problem as a possible cause for the copy quality problems and fault code listed above.

1. Remove the Developer Assembly (REP 9.3).
2. Use the flat file to remove material from the rear Guide Pin so that 3.0 mm can be measured across the flat part that remains (Figure 1).

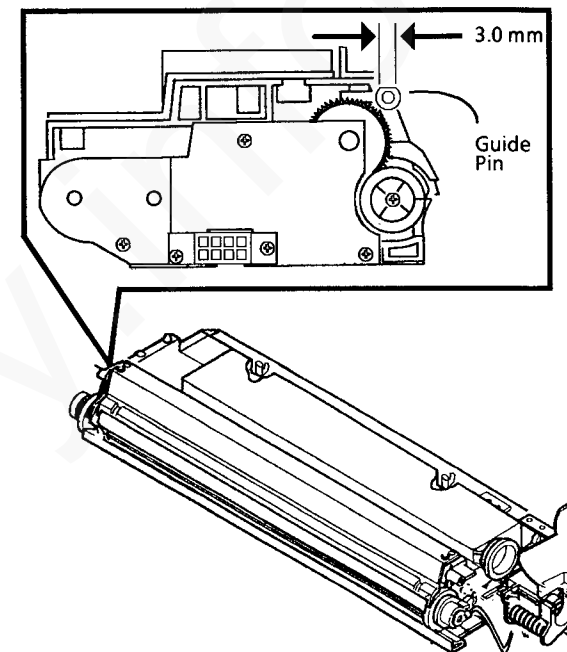


Figure 1. Removing Material from the Guide Pin

WIRE COLORS

Wire colors on replacement components may be different from the colors shown in Sections 2 and 7 of the service manual. Control of the wire colors throughout the life of the product is relatively expensive compared to the benefit gained for troubleshooting a problem when the entire wire is visible from the component to the control logic. Wire colors will not change within the wiring harness that interconnects the subsystems when the entire wire is not visible without major disassembly of the copier.

TRAY 2 PLUG

The Tray 2 P/J can be partially disassembled to allow electrical measurements to be made with the DMM. After removing the covers from the P/J as shown in figure 1, connect the P/J to the copier but leave 2mm of the connector pins exposed so that they are accessible to the meter probe.

CAUTION

The Lower PWB will be shorted and fail if the probe touches the metal frame that is above the plug while using the meter probe to make measurements.

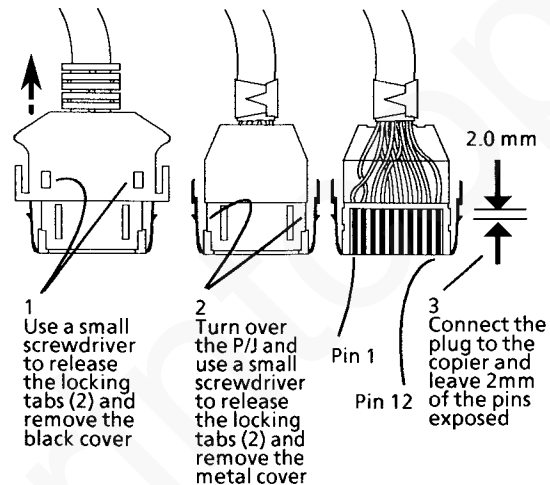


Figure 1. Partially disassembling the Tray 2 Plug

The Tag Matrix is located on the Lower Rear Cover (REP 14.4).

TAG: 1
CLASS: O
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: TONER DISPENSER AUGER REPAIR
PURPOSE: TO IMPROVE THE RELIABILITY OF TONER DISPENSING
KIT NUMBER: N/A
REFERENCE: PL 4.6

TAG: 2
CLASS: O
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: DEVELOPER ASSEMBLY GUIDE PIN
PURPOSE: TO ENSURE THAT THE DEVELOPER ASSEMBLY ENGAGES THE DRIVES CORRECTLY, TO REDUCE DRIVE NOISE AND TO IMPROVE COPY QUALITY. THE END CAP ON THE DEVELOPER ASSEMBLY IS REDESIGNED AT THE GUIDE PIN.
KIT NUMBER: N/A
REFERENCE: GENERAL SERVICE NOTE IN SECTION 6, PL 5.2A

TAG:
CLASS:
USE:
MFG SERIAL NUMBERS:

3
M / O
ALL

MANDATORY ON THE FOLLOWING COPIERS.

RX/XLA:
8KU298 100001 through 8KU298 100817

USCO:
2KU030001 through 2KU031775

XCL/XLA:
5KU035001 through 5KU035796

OPTIONAL ON THE FOLLOWING COPIERS.

RX:
8KU298 100818 through 8KU298 102654

USCO:
2KU031776 through 2KU040438

XCL/XLA:
5KU035797 through 5KU037570

XLA:
8KU298 100818 through 8KU298 102654
8KU298 500001 through 8KU298 500050

NAME: SDF LEFT COUNTERBALANCE RETROFIT KIT
PURPOSE: THE MANDATORY RETROFIT INCORPORATES SAFETY FEATURES IN THE LEFT COUNTERBALANCE. THE OPTIONAL RETROFIT IMPROVES THE ABILITY OF THE LEFT COUNTERBALANCE TO POSITION THE SDF TO PREVENT DOCUMENT DAMAGE AND MISFEEDS.
KIT NUMBER: 605K07880 MANDATORY
606K05610 OPTIONAL
REFERENCE: PL 8.1

TAG: 4
CLASS: R
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: TONER HOPPER ASSEMBLY
PURPOSE: TO IMPROVE RELIABILITY OF DRY INK DISPENSING, SUPERCEDES TAG 1 AND TAG 43
KIT NUMBER: N/A
REFERENCE: PL 5.4

TAG: 5
CLASS: R
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: DEVELOPER HOUSING ASSEMBLY
PURPOSE: TO ENSURE THE BEARINGS DO NOT RELEASE OIL INTO THE DEVELOPER.
KIT NUMBER: N/A
REFERENCE: PL 5.2A

TAG: 43
CLASS: R
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: TONER DISPENSER AUGER REPAIR KIT
PURPOSE: TO IMPROVE DRY IMAGER TRANSPORTATION.
KIT NUMBER: 600K53110
REFERENCE: PL 5.4

TAG: 44
CLASS: R
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: 250 SHEET TRAY / FEEDER REPAIR KIT
PURPOSE: IMPROVE THE RELIABILITY OF FEEDING IN THE 250 SHEET TRAY 1.
KIT NUMBER: 600K50480
REFERENCE: PL 4.6

TAG: 45
CLASS: R
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: 500 SHEET TRAY / FEEDER REPAIR KIT
PURPOSE: IMPROVE THE RELIABILITY OF FEEDING IN THE 500 SHEET TRAY 1.
KIT NUMBER: 600K50480
REFERENCE: PL 4.6

TAG: 46
CLASS: R
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: SWISS ENERGY ORDINANCE COMPLIANCE KIT (RX ONLY)
PURPOSE: TO ENSURE THAT VOLTAGE DOES NOT ENERGIZE THE OPTICS HEATER WHEN THE MAIN POWER SWITCH IS IN THE OFF POSITION.
KIT NUMBER: 600K52640
REFERENCE: N/A

TAG: 47
CLASS: R
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: DUPLEX JAM REPAIR KIT
PURPOSE: A NEW EXIT ROLLER FRAME ASSEMBLY THAT IMPROVES THE TRANSPORTATION OF TWO-SIDED COPIES THROUGH THE FUSER.
KIT NUMBER: 600K50430
REFERENCE: PL 6.2

TAG: 48
CLASS: O
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: AUDITRON KEY COUNTER
PURPOSE: TO ENABLE THE USE OF A KEY COUNTER.
KIT NUMBER: 98K27590
REFERENCE: PL 7.2

TAG: 49
CLASS: O
USE: ALL
MFG SERIAL NUMBERS: N/A
NAME: FOREIGN INTERFACE KIT
PURPOSE: TO ENABLE INSTALLATION OF A FOREIGN INTERFACE KIT ON A 5614 COPIER.
KIT NUMBER: 98K26400
REFERENCE: PL 9.2

Prepare the Second Tray Module (if supplied)

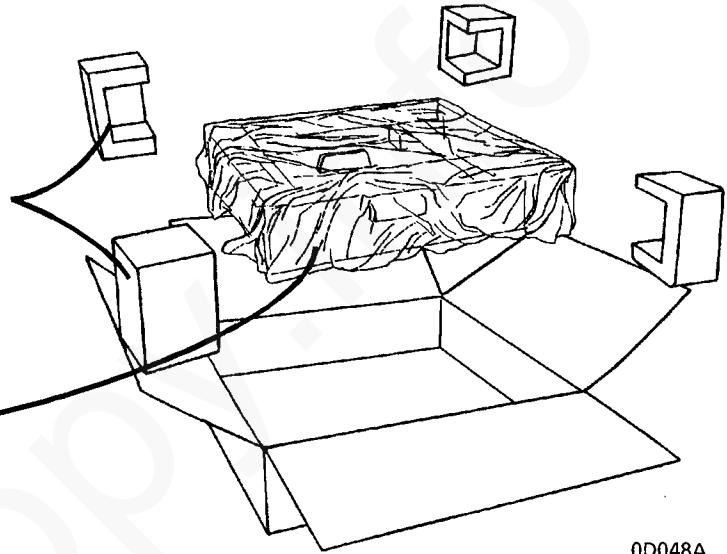
1. Unpack the Tray 2 module (Figure 1).

1 Cut tape and open box

2 Lift out the second tray module

3 Remove packing

4 Remove plastic bag



0D048A

Figure 1.

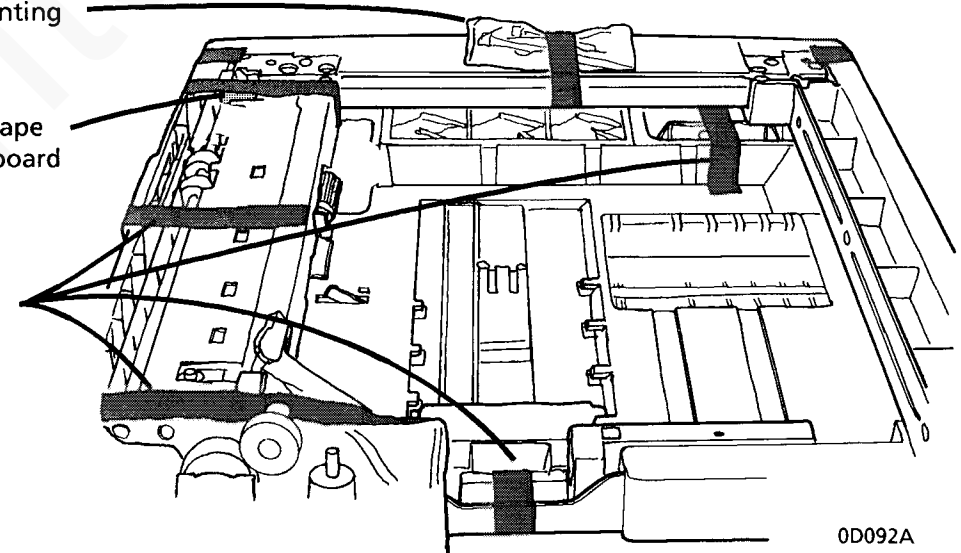
2. Place the Tray 2 module on a level surface.

3. Remove the tape, packing, and the hardware bag (Figure 2).

1 Remove mounting hardware

2 Remove the tape and the cardboard

3 Remove the other tape



0D092A

Figure 2.

4. Remove the tape (Figure 1).

5. Remove the foam block (Figure 1).

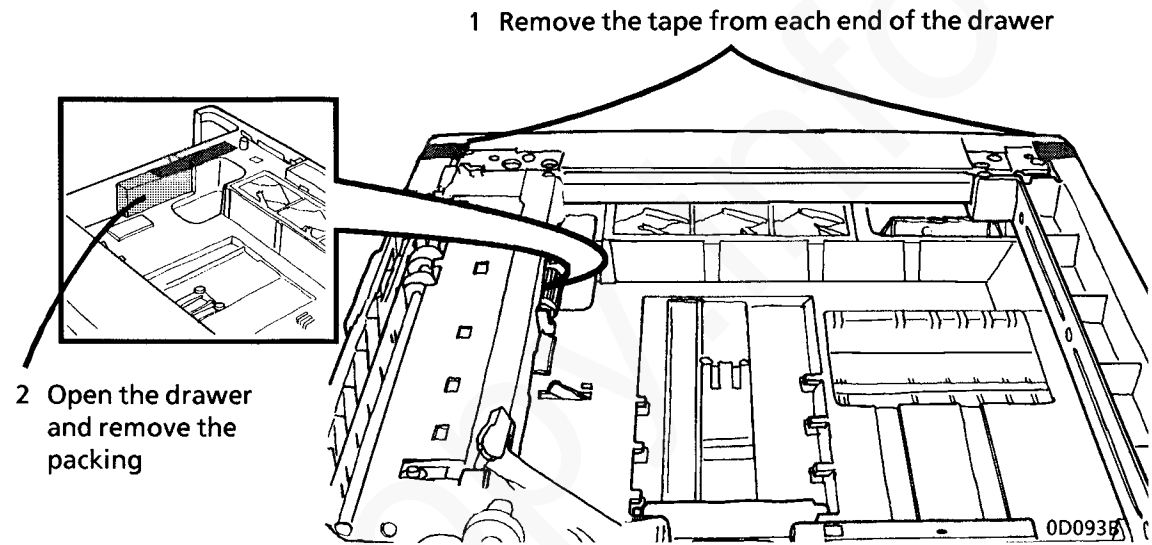


Figure 1.

6. Remove the tape holding the wiring harness (Figure 2).

7. Position the wiring harness (Figure 2).

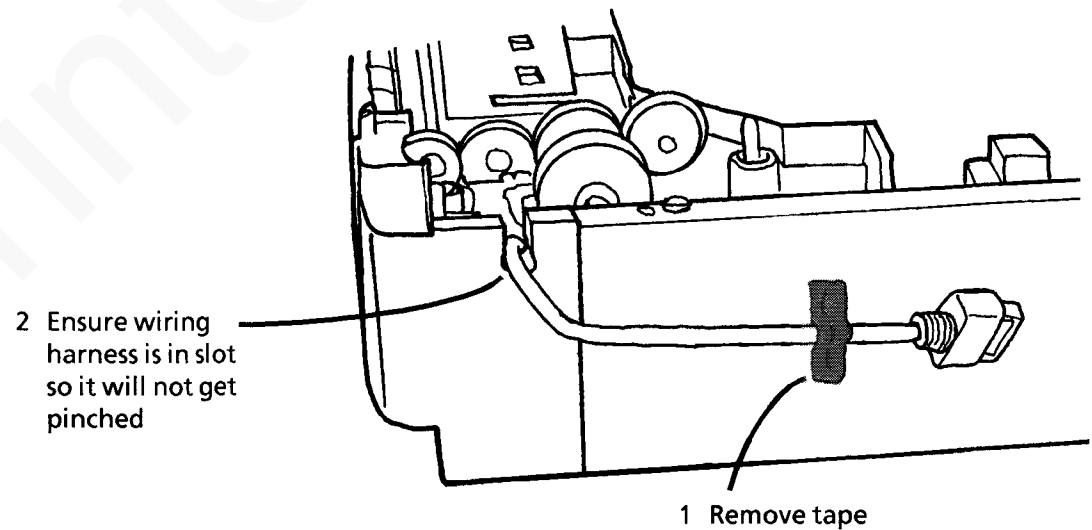


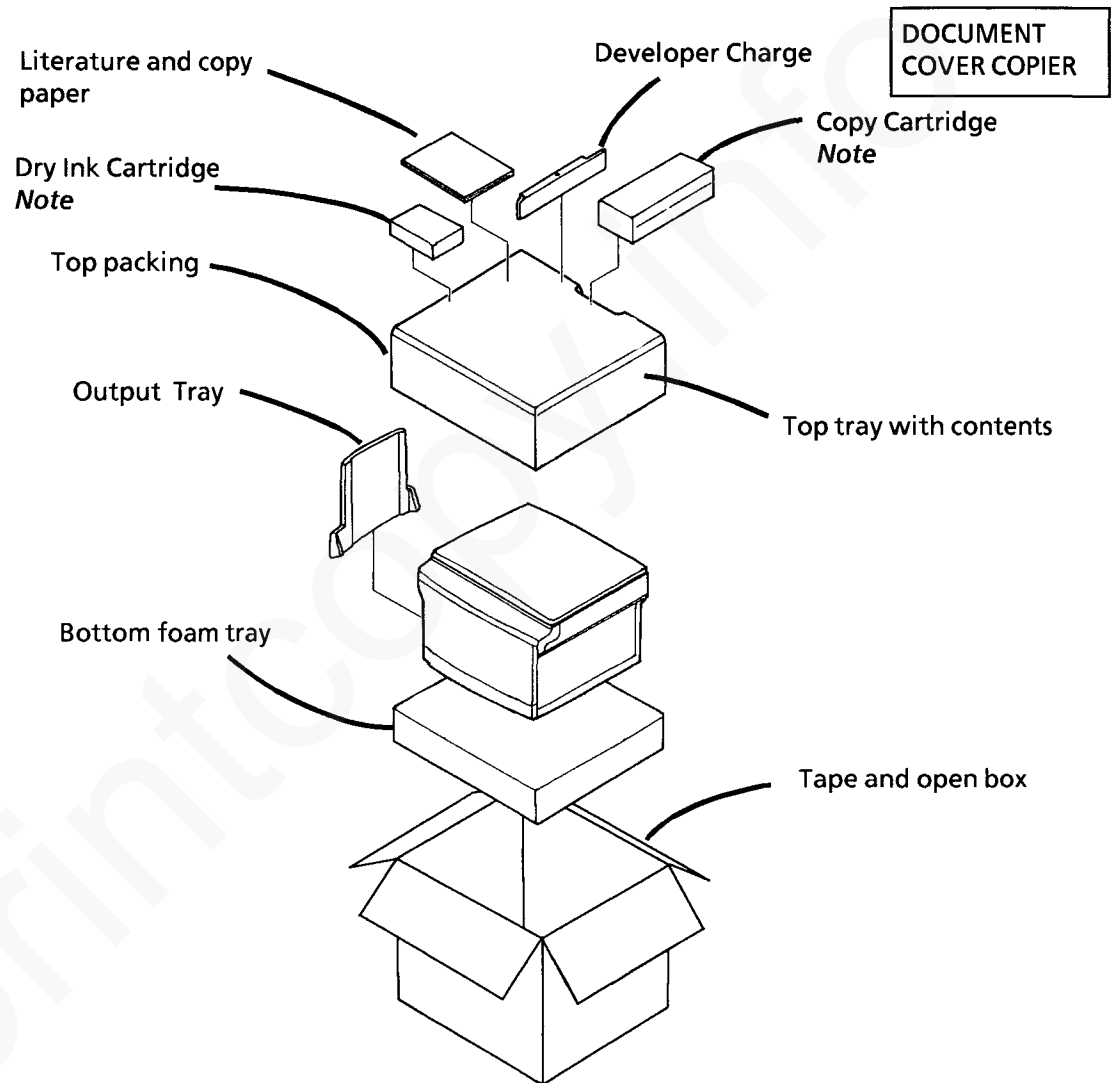
Figure 2.

Unpacking the Document Cover Copier

Unpack the copier (Figure 1).

1. Lift out the top tray with its contents and set on a flat surface.
 - Copy Cartridge (non-RX)
 - Developer Charge
 - Literature (Operator Guide, etc.)
 - Copy paper
 - Dry Ink Cartridge (non-RX)
2. Lift out the Output Tray.
3. Carefully cut and open the plastic bag over the copier.

NOTE: In RX copiers, the Dry Ink Cartridge and the Copy Cartridge is installed during manufacture of the copier.



0D038A

Figure 1.

Unpacking the SDF Copier

Unpack the copier (Figure 1).

1. Lift out top tray with its contents and set on a flat surface. Contents of the top tray are:
 - Copy Cartridge (non-RX)
 - Developer Charge
 - Literature (Operator Guide, etc.)
 - Copy paper
 - SDF Catch Tray
 - Dry Ink Cartridge (non-RX)
2. Lift out Output Catch Tray.
3. Carefully cut and open the plastic bag over the copier.

NOTE: In RX copiers, the Dry Ink Cartridge and the Copy Cartridge are installed during manufacture of the copier.

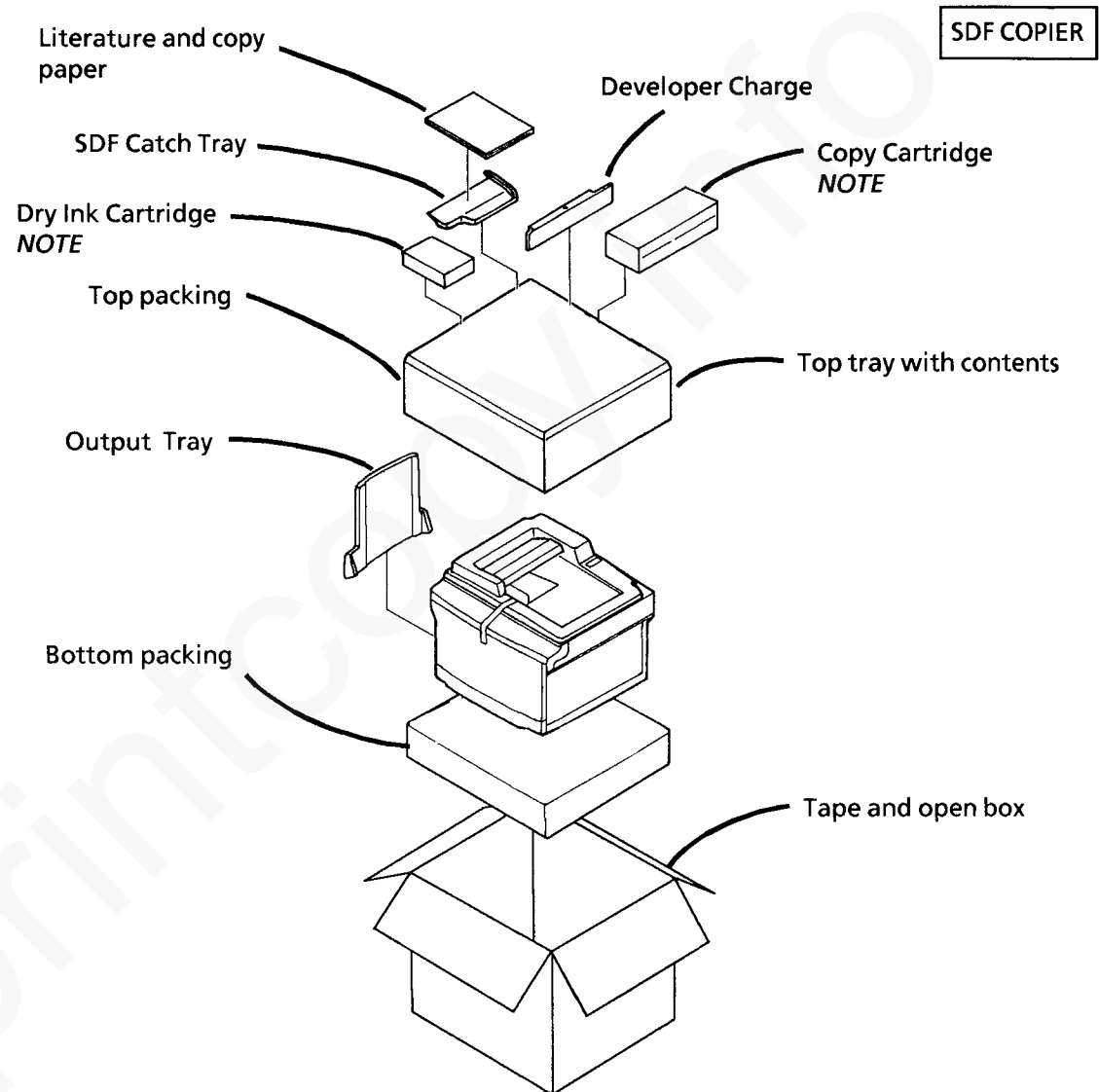


Figure 1.

0D039A

Lifting the Copier

WARNING

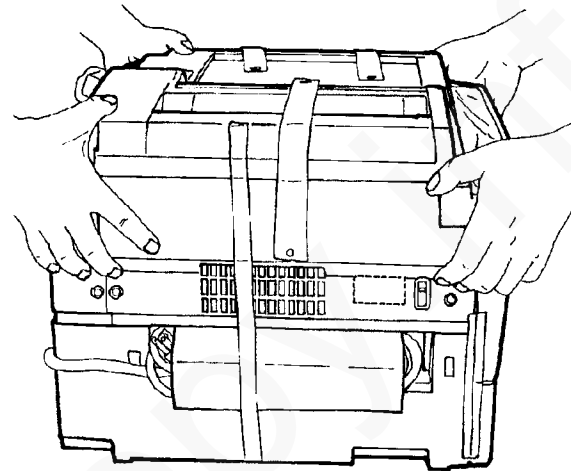
The copier is heavy. Two people are required to lift it. If special care is not used when lifting the copier, personal injury or damage to the copier could occur.

CAUTION

Lift the copier only at the corners. Do not lift on the Bypass tray. Lift with one person at the front and one at the rear, not at the sides.

1. Lift the copier out of the shipping box and place on a level surface (Figure 1).

Lift at the front and the rear



0D060A

Figure 1.

Preparation of the Processor

1. Remove the tape and plastic film (Figure 2).

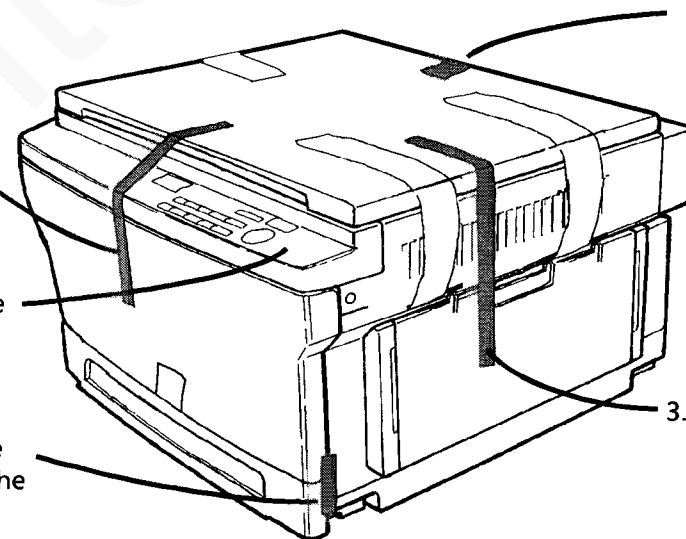
1. Remove the tape on the front door

2. Remove the tape from the rear

5. Remove the plastic over the control panel

4. Remove the tape from the paper tray

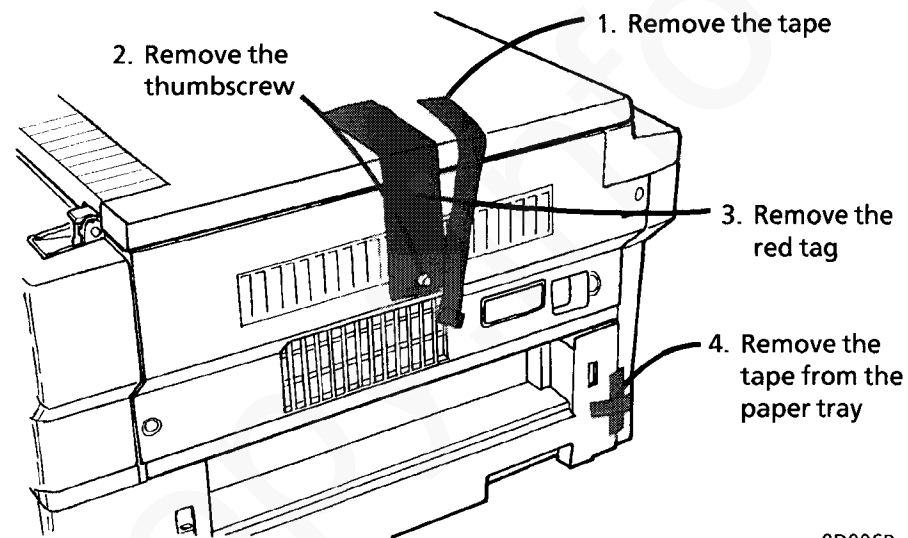
3. Remove the tape from the Bypass tray



0D005B

Figure 2.

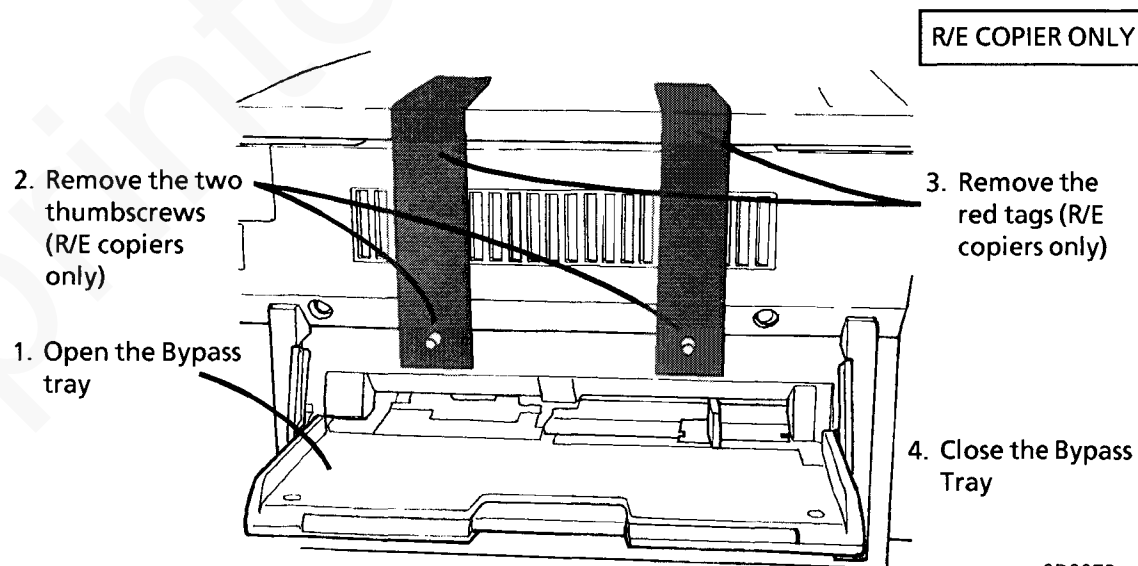
2. Remove the tape, tag, and thumbscrew (Figure 1).



0D006B

Figure 1.

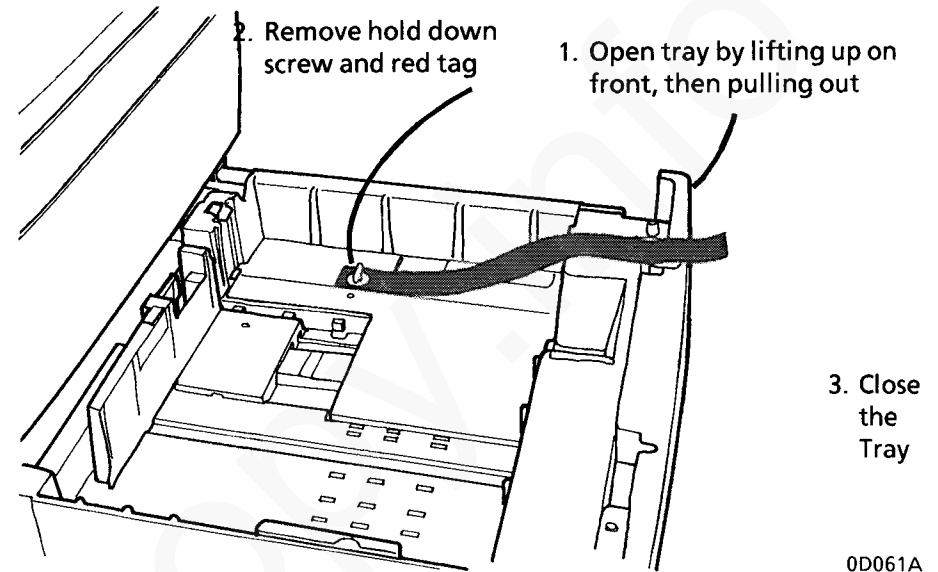
3. **R/E Machines only:** Remove the two thumbscrews and tags (Figure 2).



0D007B

Figure 2.

4. **500 Sheet Tray Only:** Remove the hold down screw and tag (Figure 1).

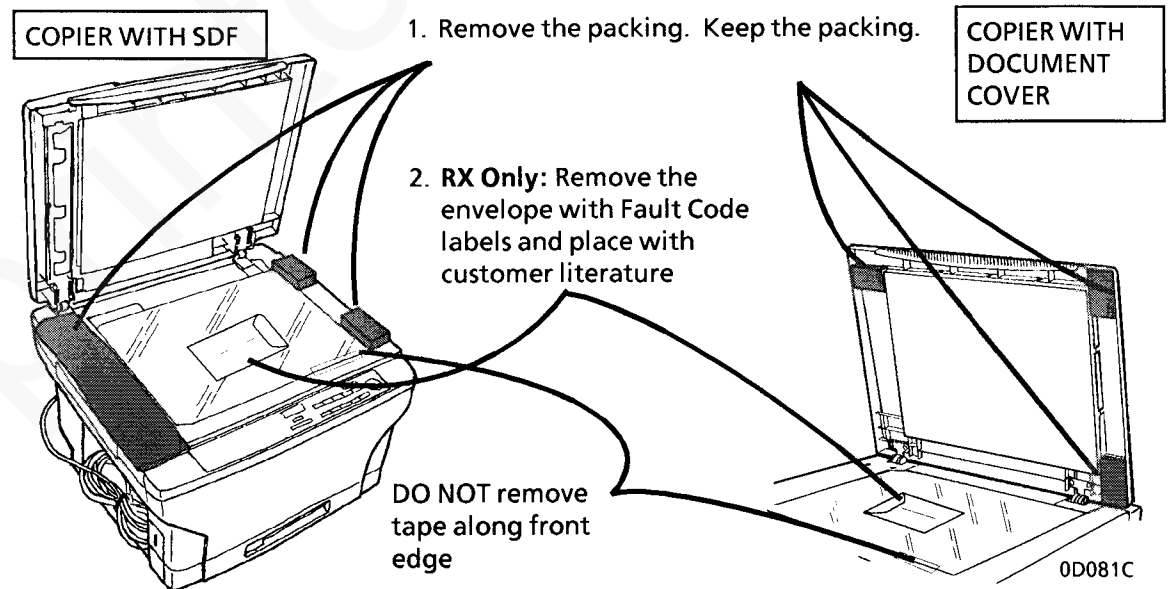


0D061A

Figure 1.

5. Remove the packing and envelope containing the Fault Code labels (Figure 2).

6. Place the envelope containing the Fault Code labels and place it in the Customer literature package.



0D081C

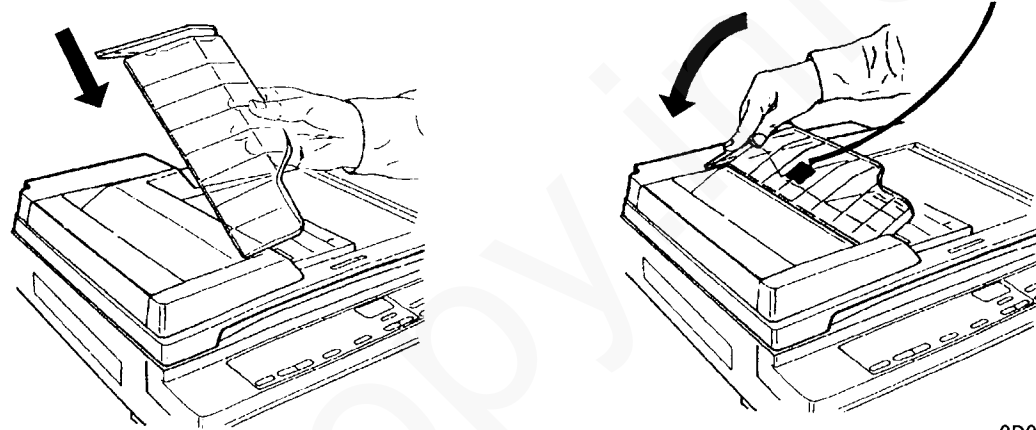
Figure 2.

7. **SDF Copiers only:** Install the SDF Document Catch Tray (Figure 1).

1. Insert front end of tray into slot

2. Snap rear end of tray into holes

3. Remove the tape

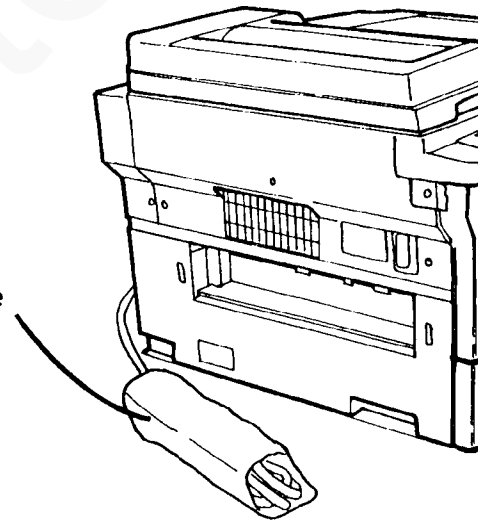


0D009A

Figure 1.

8. **Non-RX Only:** Remove the power cord from the cardboard sleeve (Figure 2).
9. **RX Only:** Connect the power cord to the copier.

Remove power cord from sleeve

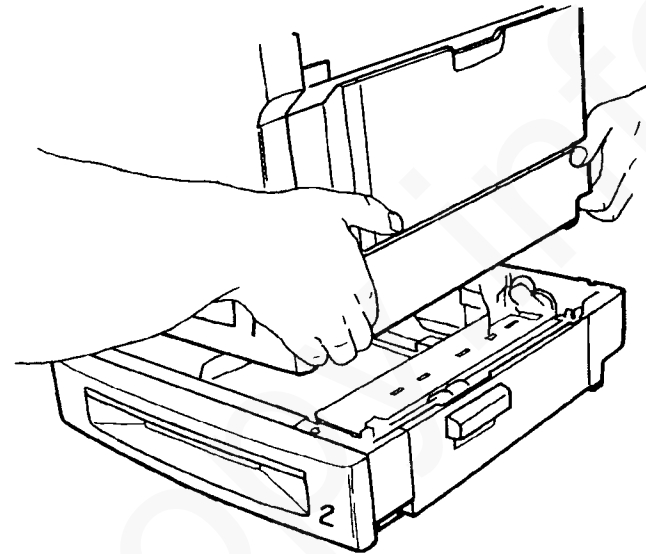


0D067C

Figure 2.

Installation on Second Tray Module (if supplied)

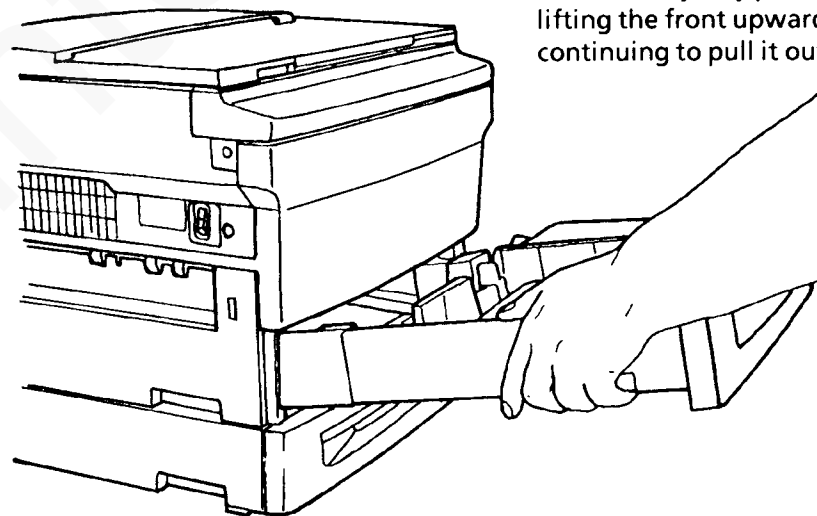
1. Place the copier on the Tray 2 module (Figure 1).



0D052A

Figure 1.

2. Remove Tray 1 (Figure 2).

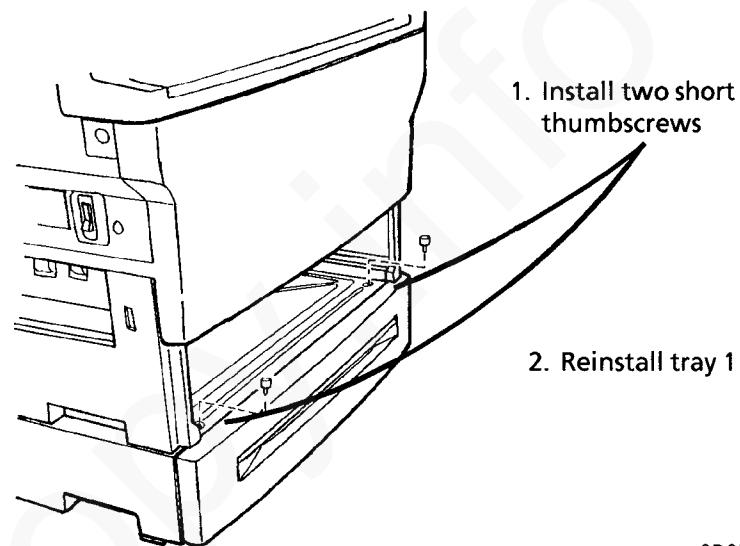


Remove Tray 1 by pulling it out,
lifting the front upwards, and then
continuing to pull it out

0D053A

Figure 2.

3. Locate the Tray 2 module installation hardware bag and remove the 2 short thumbscrews and 2 long thumbscrews
4. Install the two short thumbscrews down through the bottom of the copier frame and into the second tray module (Figure 1).

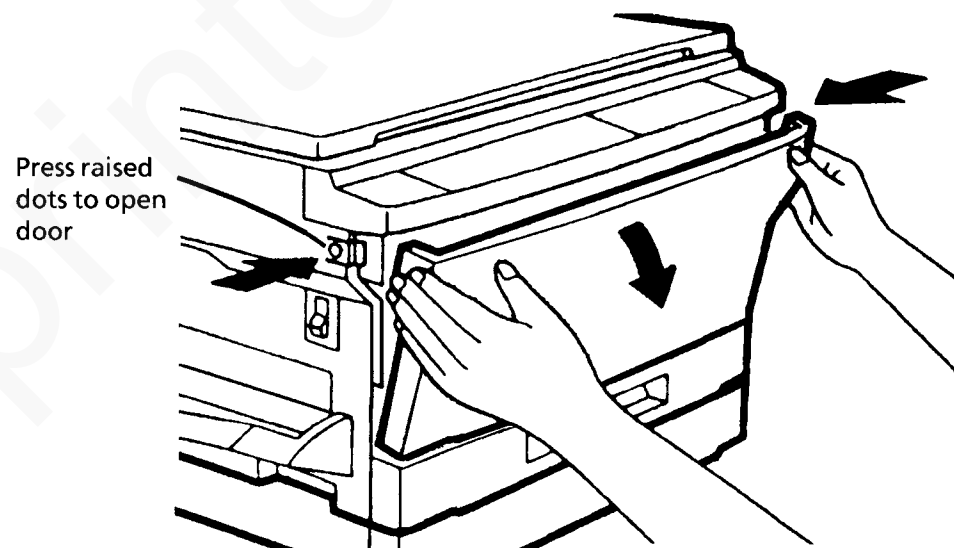


0D054A

Figure 1.

5. Reinstall Tray 1 into the copier.

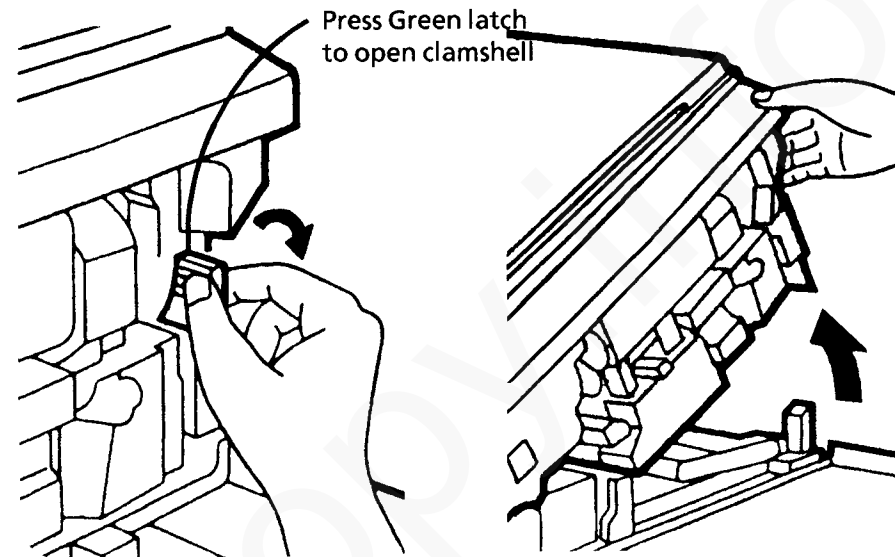
6. Open the front door on the copier (Figure 2).



0D025A

Figure 2.

7. Open the copier (Figure 1).

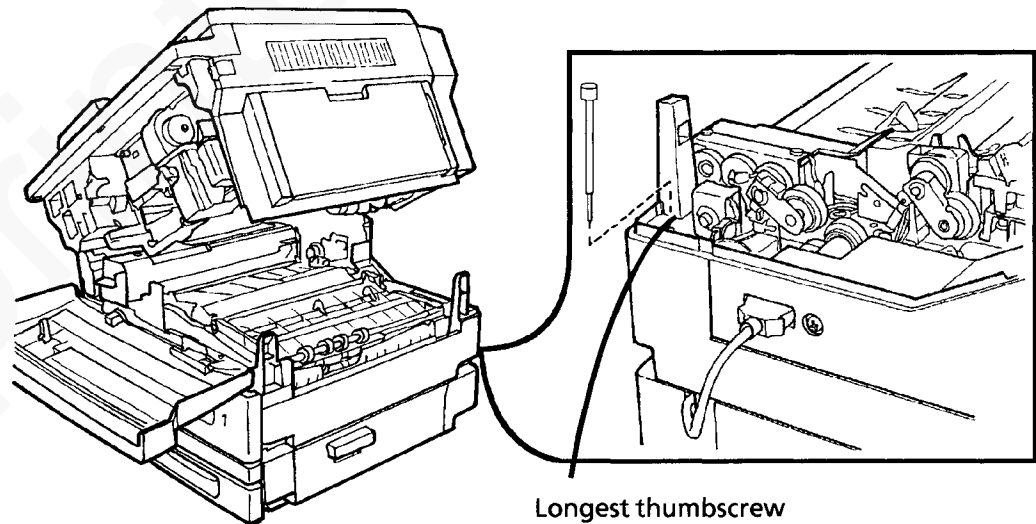


0D036A

Figure 1.

8. Install the longest thumbscrew down through the copier and into the second tray (Figure 2).

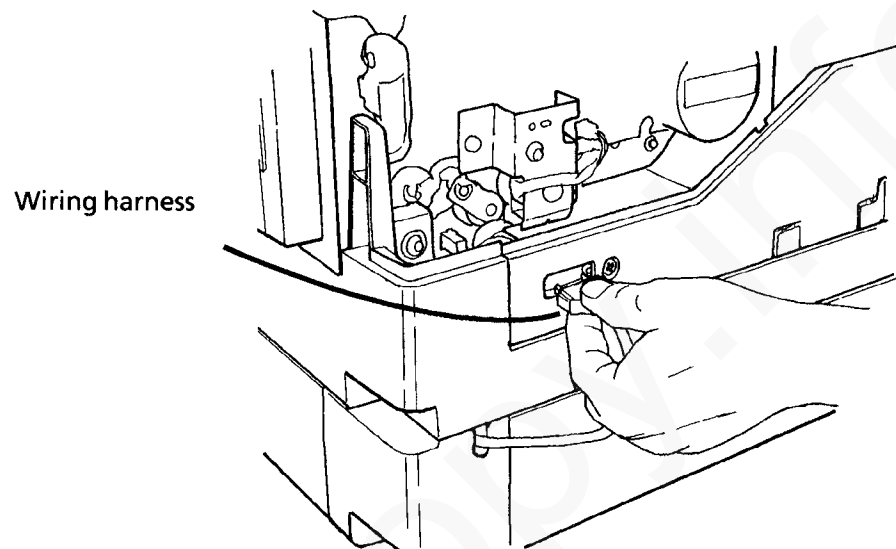
9. Discard the shorter thumbscrew of the two long thumbscrews.



0D062A

Figure 2.

10. Connect the wiring harness (Figure 1).



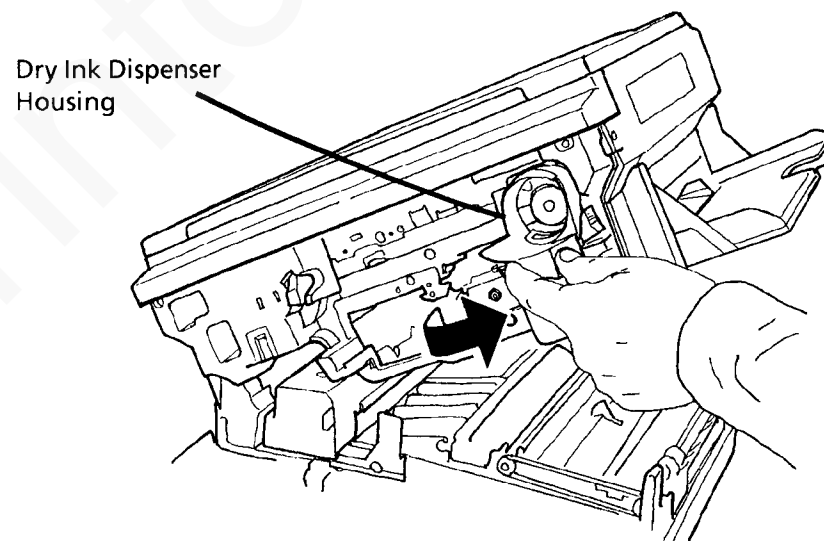
0D056A

Figure 1.

Assemble the Processor

NOTE: Steps 1 to step 6 on page 6-35 is for all copiers except RX.

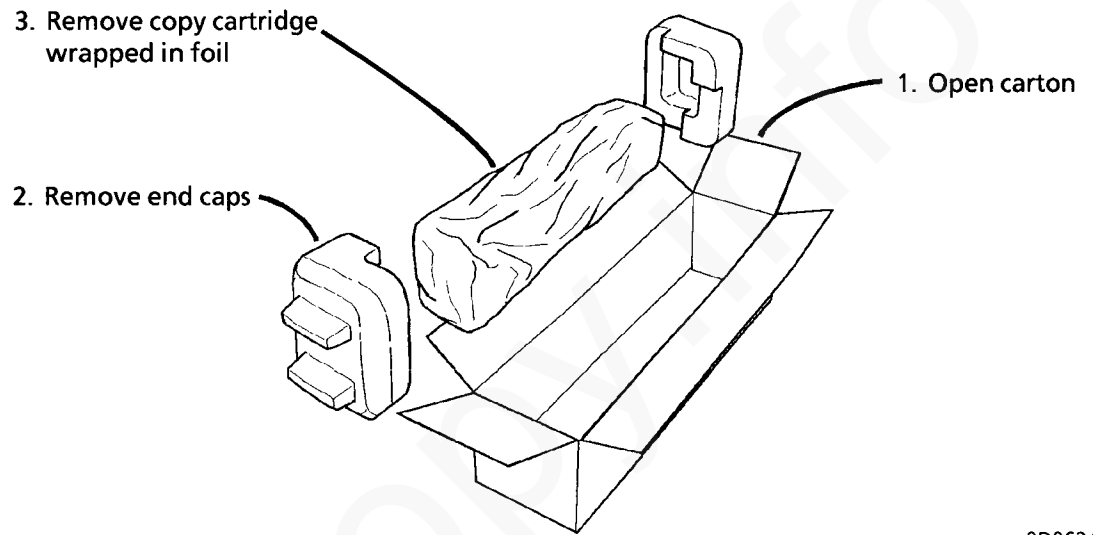
1. Open the copier and swing out the Dry Ink Dispenser housing (Figure 2).



0D012A

Figure 2.

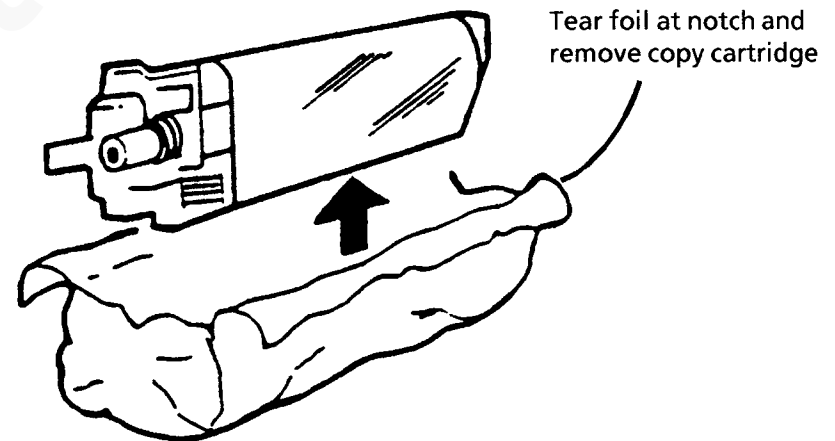
2. **Non-RX Only:** Remove the Copy Cartridge from the box (Figure 1).



0D063A

Figure 1.

3. **Non-RX Only:** Remove the Copy Cartridge from the bag (Figure 2).



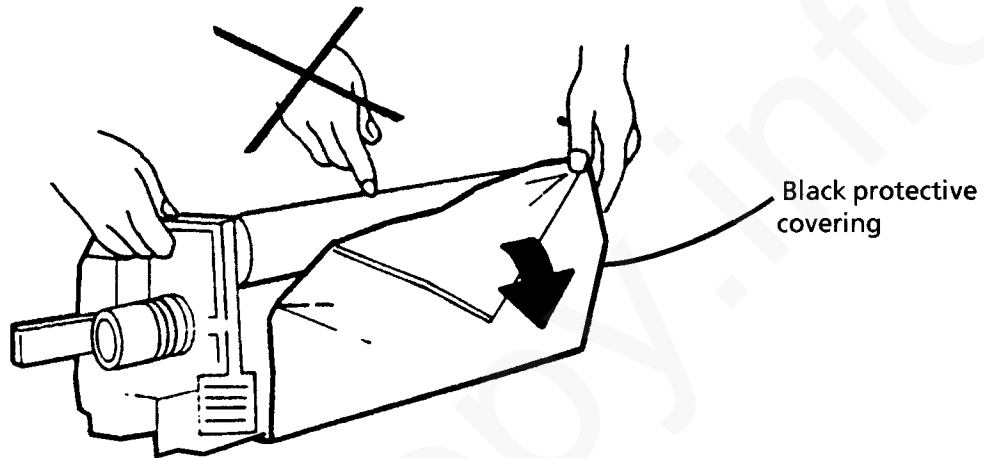
0D078A

Figure 2.

CAUTION

Handle the copy cartridge only by the ends. Do not touch the copper colored photoreceptor roller.

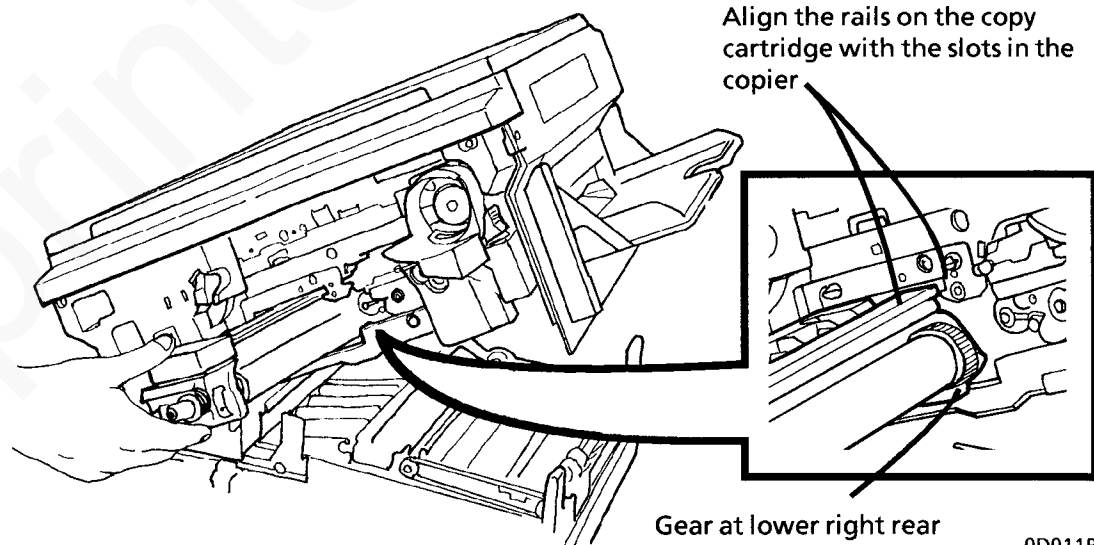
4. **Non-RX Only:** Grasp the black protective covering at the arrows and carefully remove the covering from the copy cartridge (Figure 1).



0D079A

Figure 1.

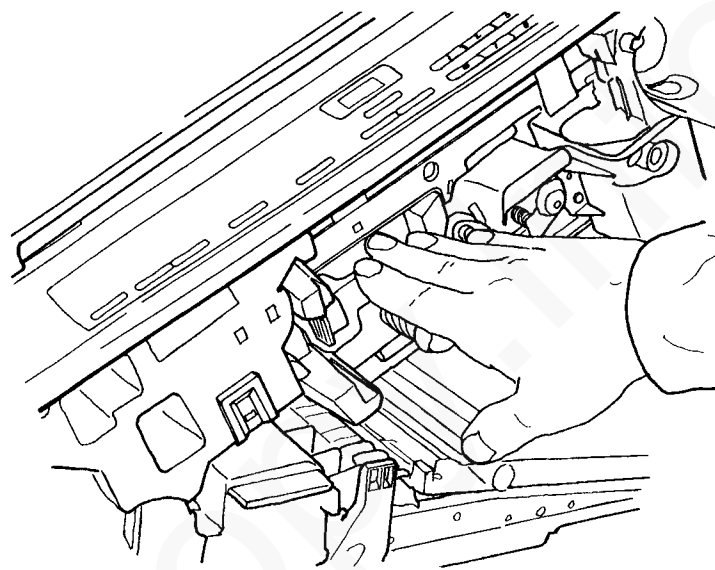
5. **Non-RX Only:** Install the copy cartridge (Figure 2).



0D011B

Figure 2.

6. **Non-RX Only:** Push the copy cartridge all the way into the copier until it latches and close the copier (Figure 1).



0D046A

Figure 1.

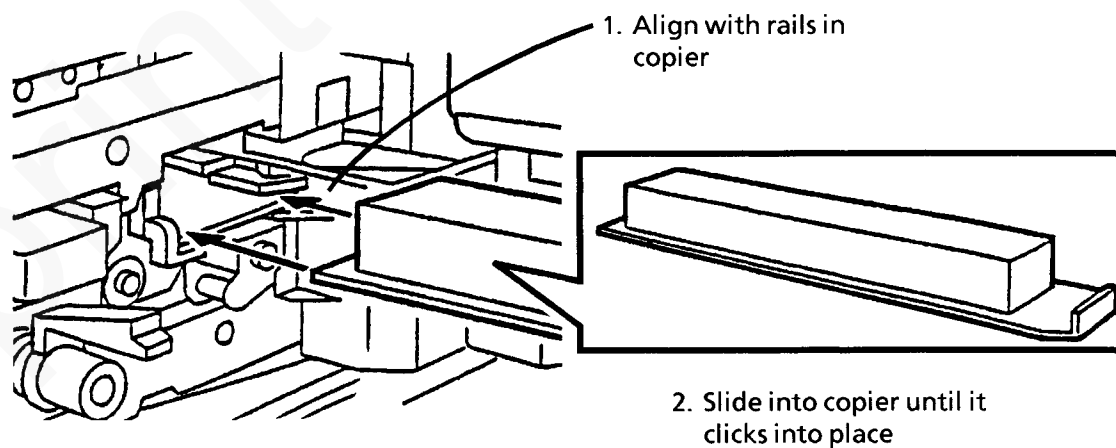
7. Get the Developer Cartridge from the top tray of the packing.

CAUTION

Do not press on the soft plastic face of the Developer Cartridge.

8. Insert the Developer Cartridge into the copier until it latches in place (Figure 2).

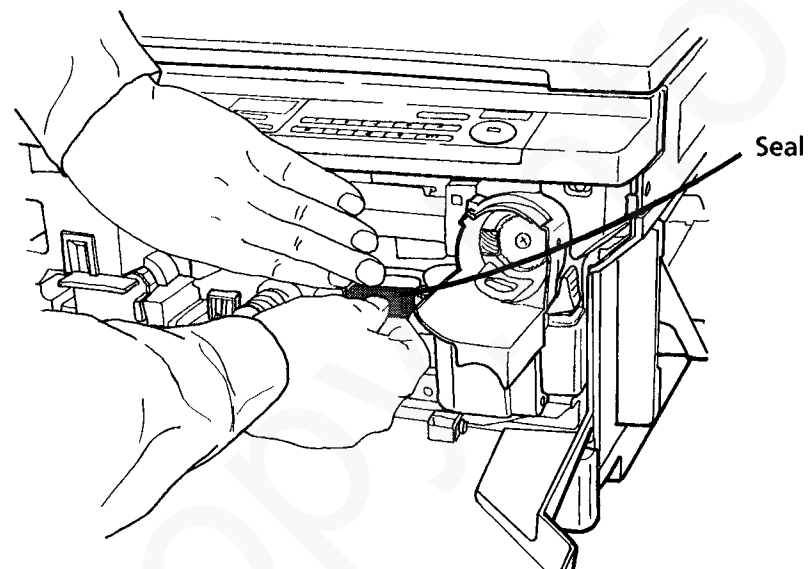
NOTE: *If the Developer Cartridge stops moving while being pushed in, move the end up or down slightly and try again.*



0D040A

Figure 2.

9. Remove the seal from the cartridge after the cartridge is installed (Figure 1).



0D047A

Figure 1.

10. Unpack and shake the dry ink cartridge (Figure 2).

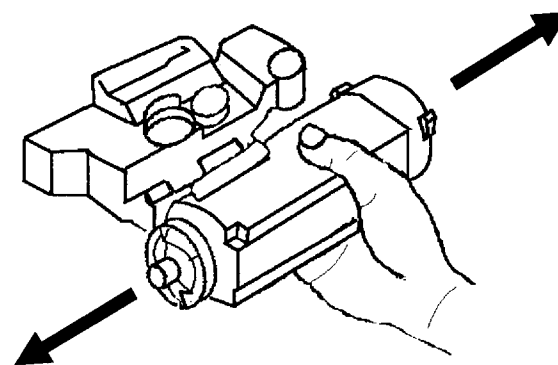
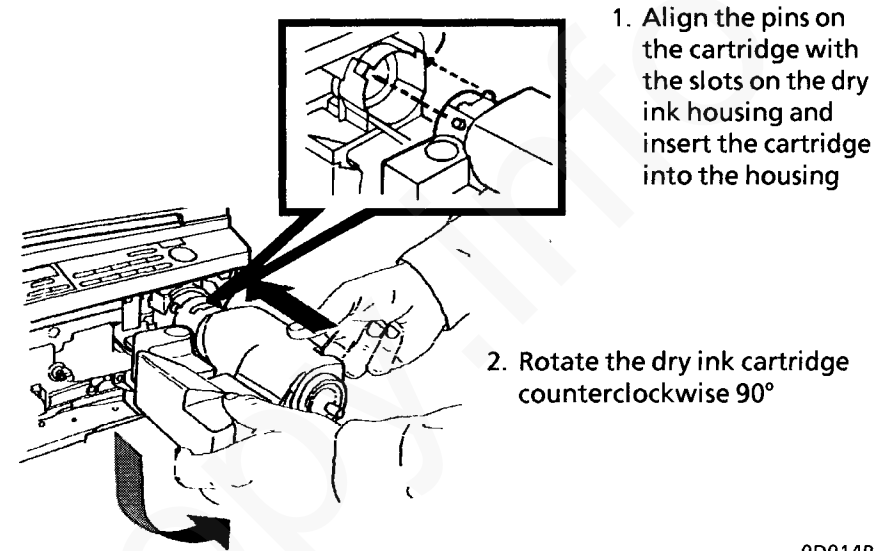


Figure 2.

11. Install the dry ink cartridge (Figure 1).

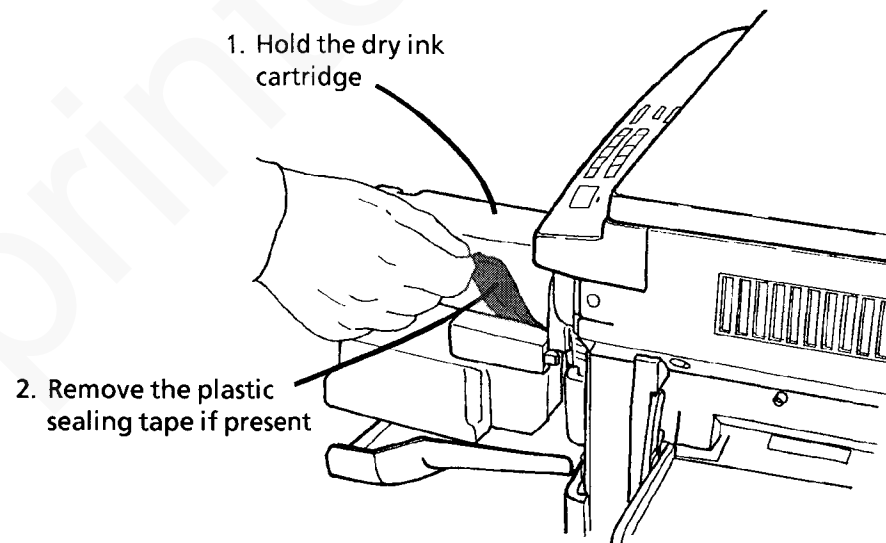


0D014B

Figure 1.

12. If no white plastic sealing tape is present on the Dry Ink Cartridge, go to the next page.

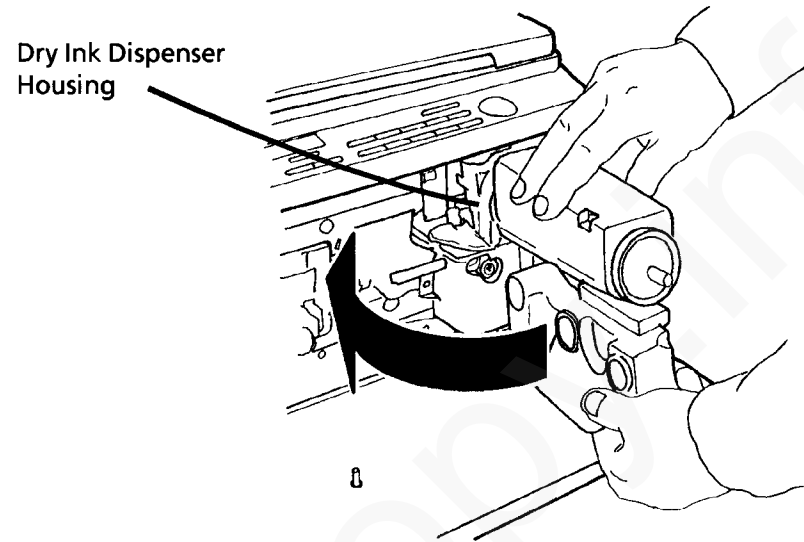
If white plastic sealing tape is present on the Dry Ink Cartridge, pull out the sealing tape completely while holding the Dry Ink Cartridge (Figure 2).



0D016A

Figure 2.

13. Swing the Dry Ink Dispenser Housing closed (Figure 1).



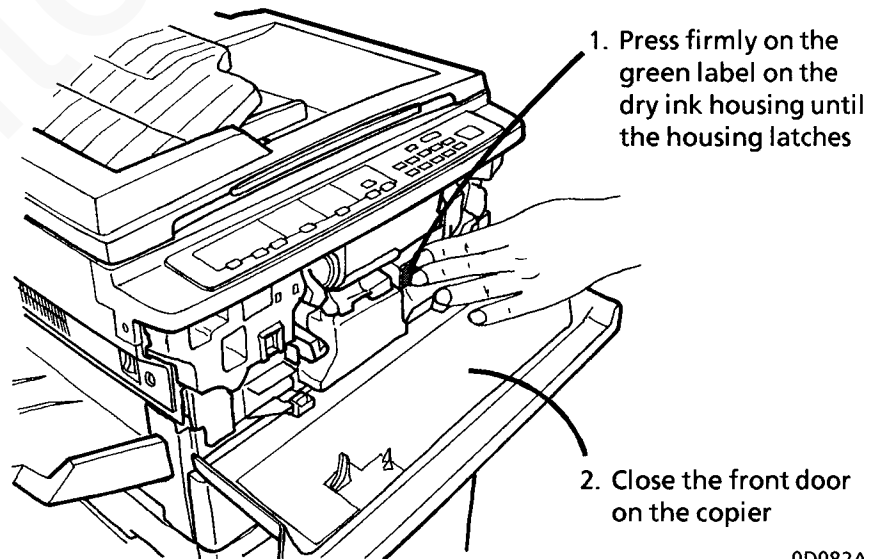
0D017A

Figure 1.

CAUTION

It is important to push on the Green Panel and not the Dry Ink Cartridge to avoid problems associated with an incorrect interface between the photoreceptor and the Mag Roll of the Developer Assembly.

14. Press the green label on the dry ink housing firmly until the housing latches (Figure 2).
15. Close the front door on the copier.



0D082A

Figure 2.

Unpacking the Cabinet Stand

NOTE: The copier mounting screws are taped to the bottom of the cabinet stand. Remove and retain the screws before removing the stand from the box.

1. Unpack the cabinet stand (Figure 1).

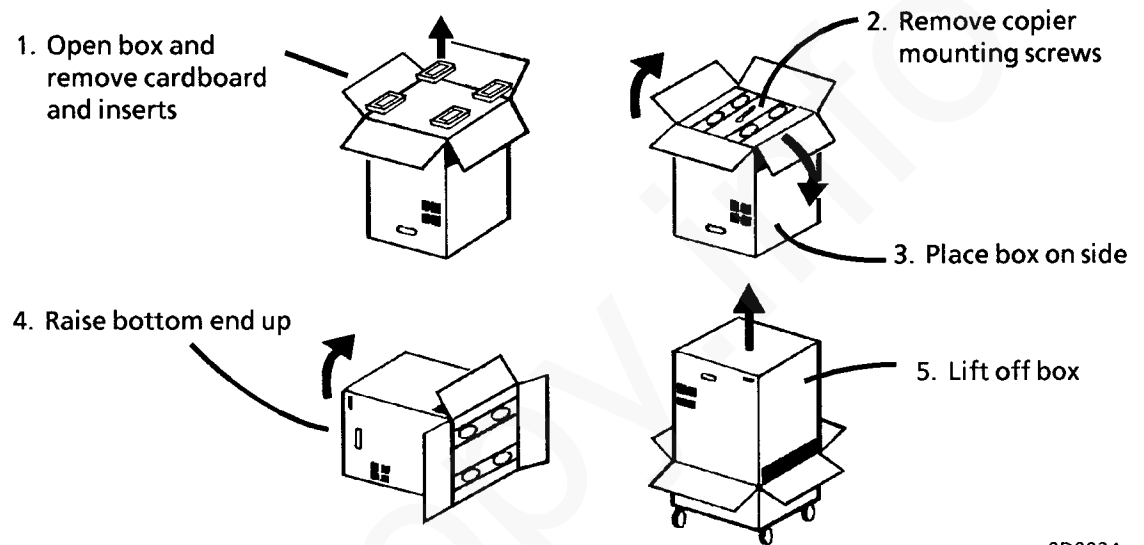


Figure 1.

0D003A

Lifting the Copier

WARNING

The copier is heavy. Two people are required to lift it. If special care is not used when lifting the copier, personal injury or damage to the copier could occur.

CAUTION

Lift the copier only at the bottom corners. Do not lift on the Bypass tray.

1. Lift the copier (Figure 2).

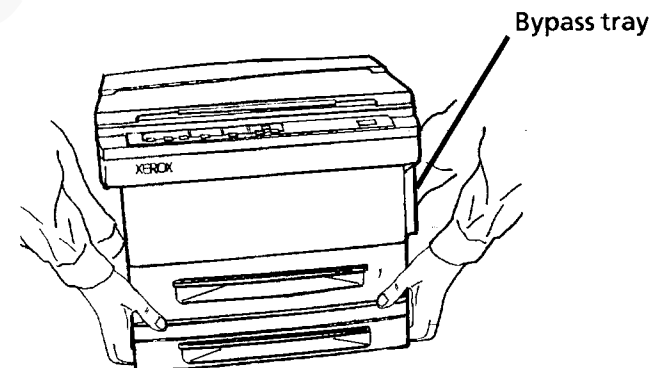


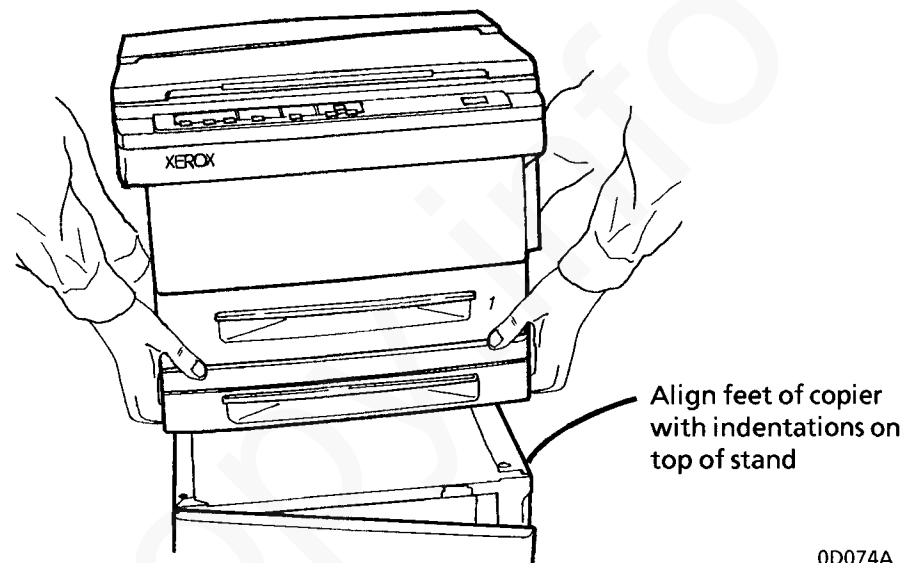
Figure 2.

0D073A

Installation on Cabinet Stand

1. Place the copier on the cabinet stand while aligning the feet of the copier with the indentations in the top of the stand (Figure 1).

NOTE: The indentations are difficult to see when placing the copier on the stand. Align the covers of the copier with the edges of the stand to help place the copier correctly.



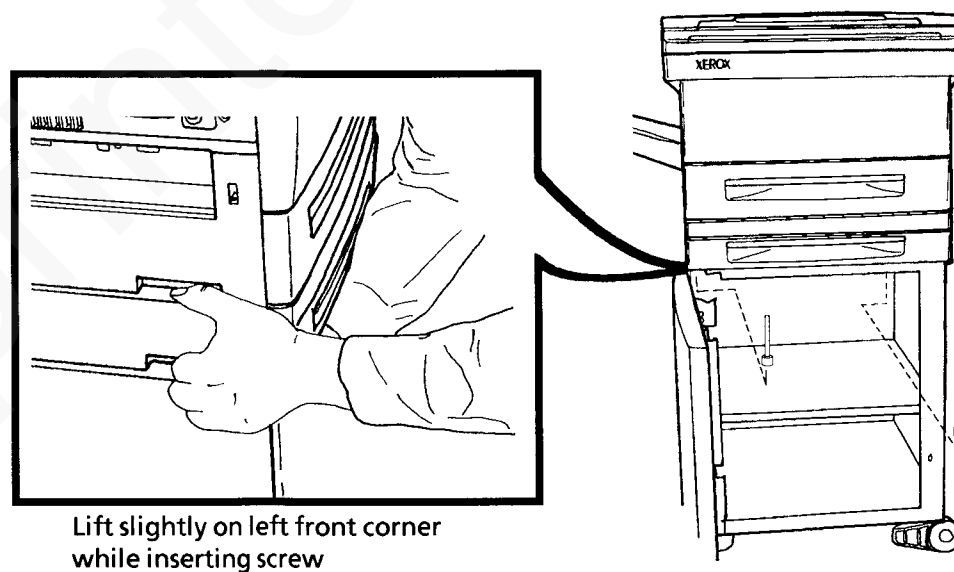
0D074A

Figure 1.

2. Secure the copier to the stand with two thumbscrews from the plastic bag packed with the stand (Figure 2). Insert one screw in the right rear corner and one in the left front corner.

NOTE: The longer thumbscrews must be used if the copier has the second tray module.

NOTE: Slightly lifting the front left corner of the copier will make insertion of the screw easier.



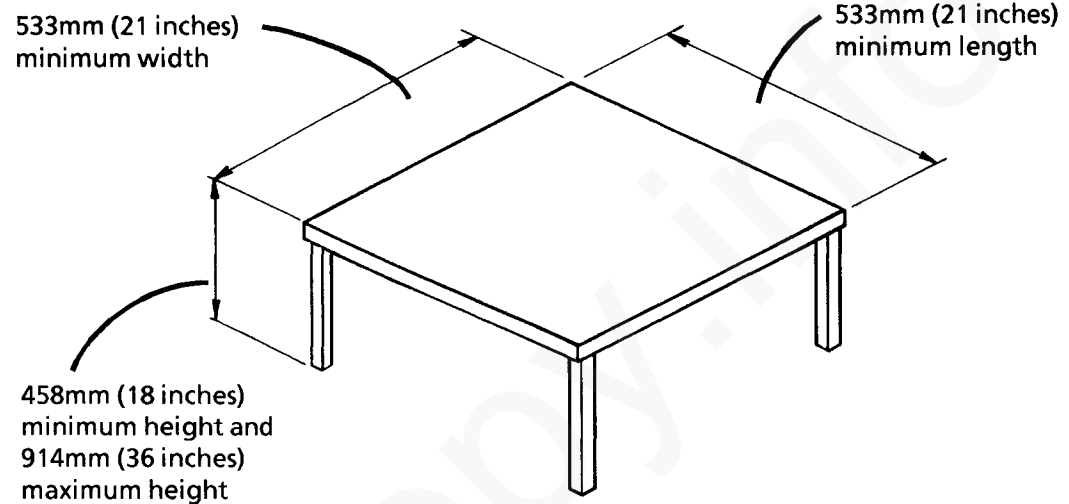
0D075A

Figure 2.

Installation on a Customer Stand

NOTE: The 5614 copier may be mounted on a customer supplied stand with or without casters. The stand must be rigid, stable, and capable of supporting a weight of 150 pounds in a level condition. An installation on a Customer supplied stand must meet the applicable space requirements. Xerox assumes no responsibility for such a stand and Xerox also reserves the right to refuse to install or service a copier on any customer supplied stand which, in the opinion of Xerox, presents a safety hazard to personnel and/or property.

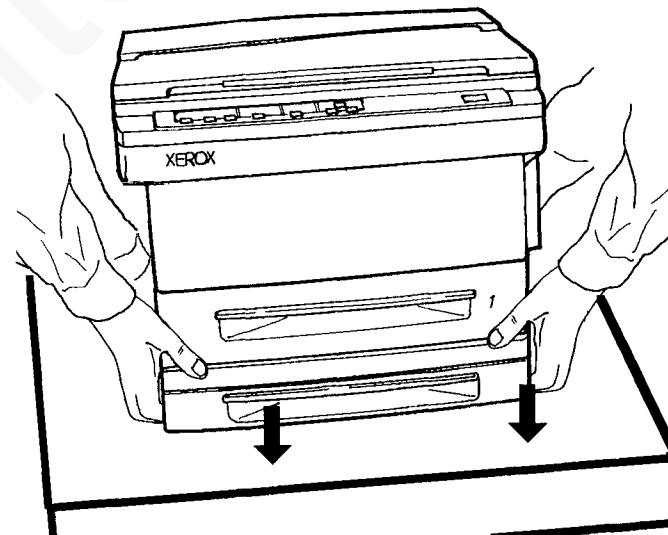
NOTE: The minimum allowable size of the stand is shown in Figure 1. The stand must provide a level mounting surface for the copier. If the stand is too small abort the installation.



0D004A

Figure 1.

1. Place the copier on the stand provided by the customer (Figure 2).
2. Check the Copier Level (ADJ 1.1).

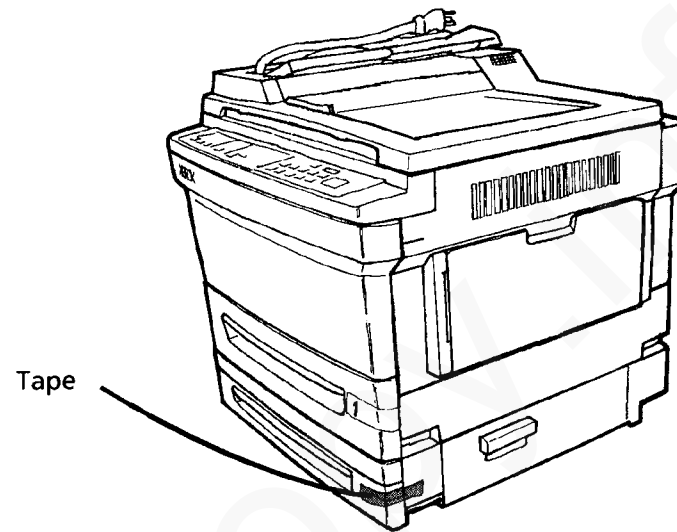


0D076A

Figure 2.

Final Processor Unpacking

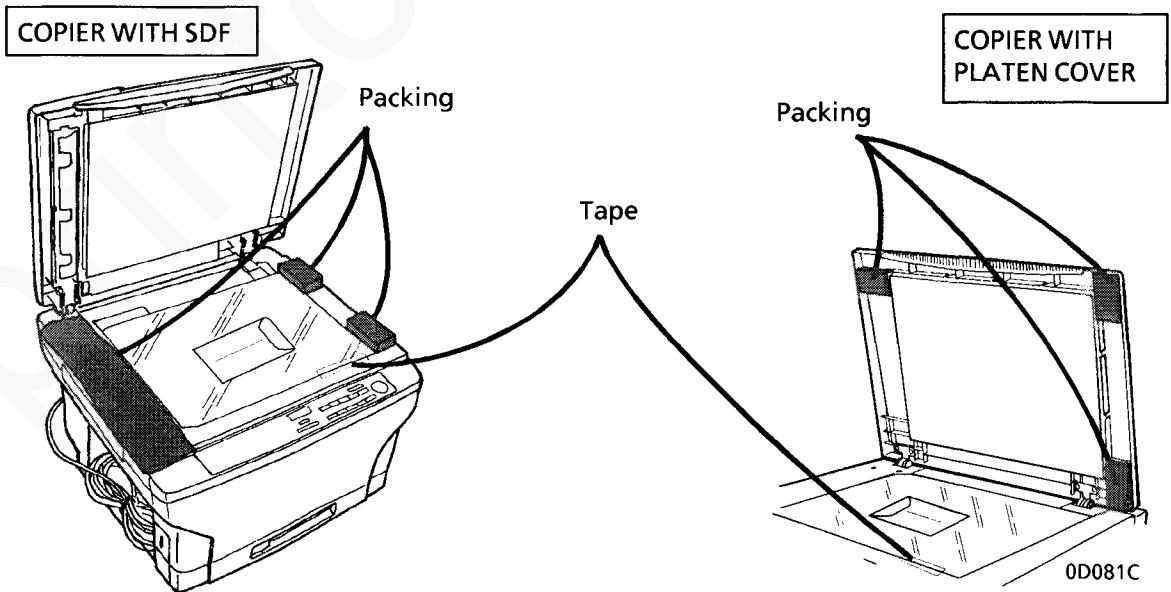
1. Remove the tape from Tray 2 (Figure 1).



0D065C

Figure 1.

2. Remove the packing (Figure 2).

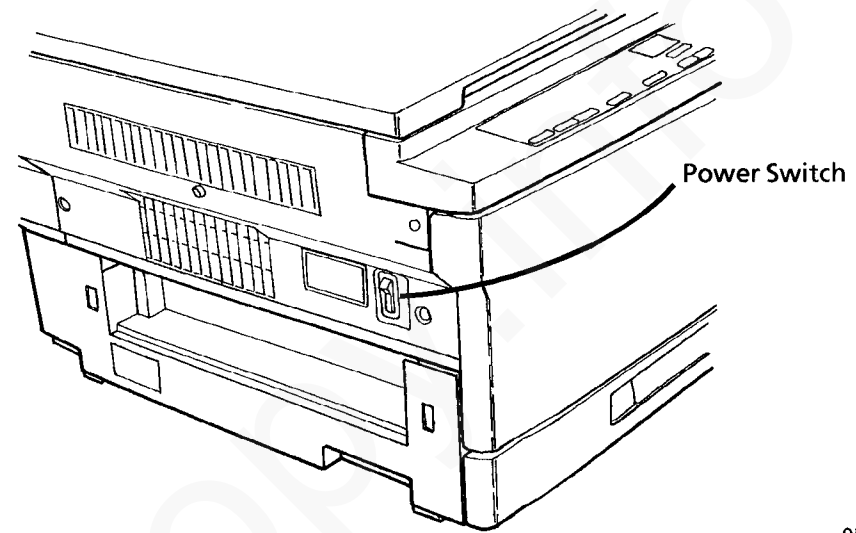


0D081C

Figure 2.

Copier Initialization

1. Check the Copier Level (ADJ 1.1).
2. Plug the power cord into the power receptacle. Switch on the power to the copier (Figure 1).



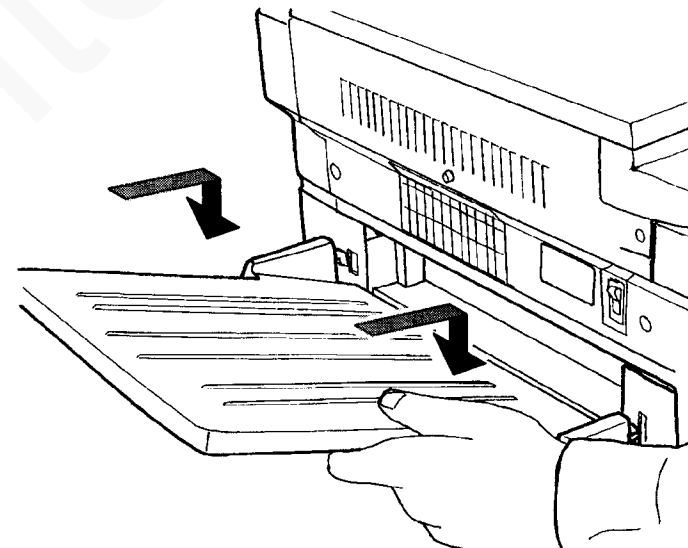
0D001A

Figure 1.

Install the Output Tray

1. Install the Output Tray on the left side of the copier (Figure 2).

Output Tray

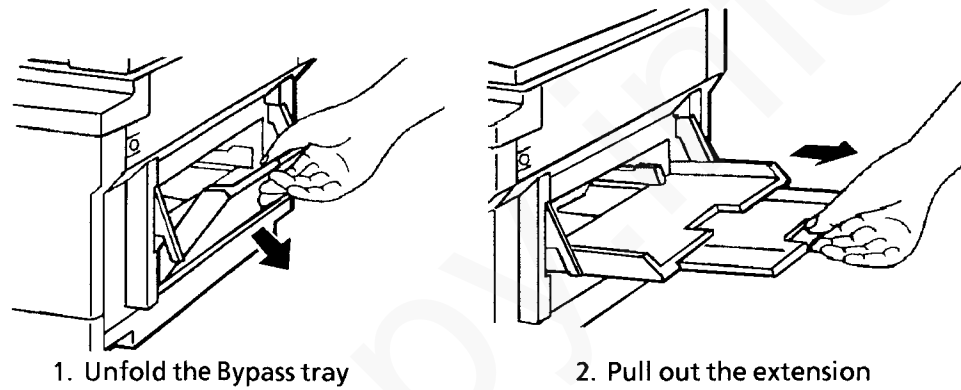


0D018A

Figure 2.

Prepare the Bypass Tray

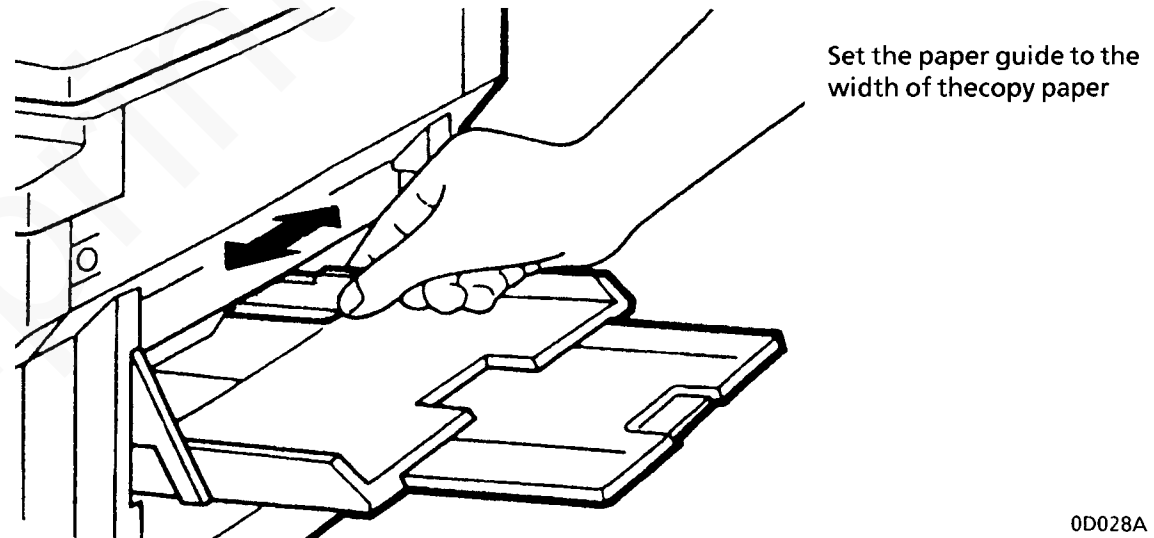
1. Prepare the Bypass Tray (Figure 1).



0D027B

Figure 1.

2. Adjust the paper guide (Figure 2).



0D028A

Figure 2.

Alternate Language Status Code Label

1. Ask the Customer if they want the Status Code Label in either Spanish or Canadian French.
2. If required, open the label envelope (packed with the Customer literature) and apply the appropriate language Status Code Label as shown in Figure 1.

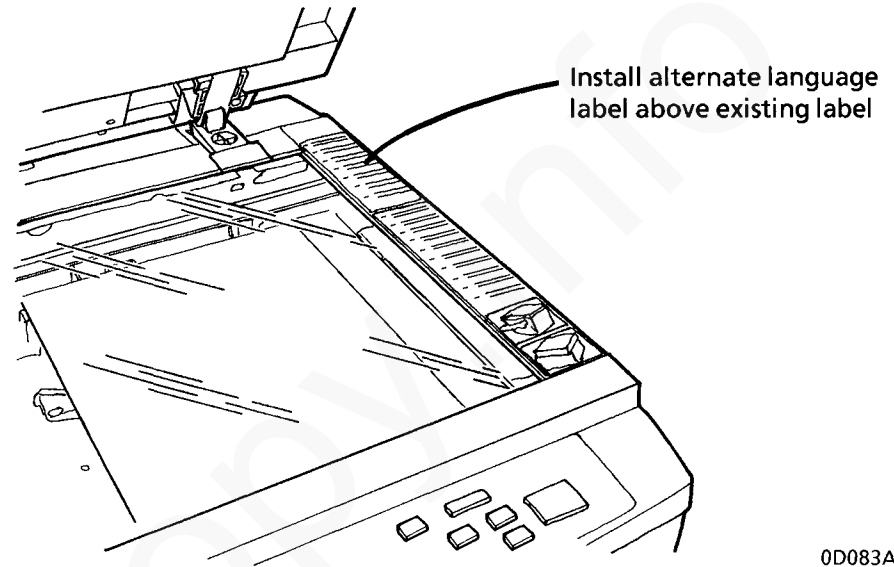


Figure 1.

0D083A

Install Checklist

- ☐ Unpack and prepare the Tray 2 module (if supplied).
- ☐ Unpack the copier. Keep the plastic bag for reuse.
- ☐ Remove the tape on the:
 - ☐ Front door
 - ☐ Top rear
 - ☐ Bypass tray
 - ☐ Paper tray
- ☐ Remove the plastic film from the control panel.
- ☐ Remove the optical tie down thumbscrew from the left side of the copier and discard the red notification tag.

R/E copier only:

- ☐ Open the Bypass tray and remove the two optical tie down thumbscrews. Discard the red notification tags. Close the Bypass tray.
- ☐ **500 Sheet Tray Only:** Open the paper tray and remove the hold down screw. Discard the red notification tag. Close the paper tray.
- ☐ Place the copier on the second tray module.
- ☐ Open the copier and secure to the second tray module with the screws provided (2 in front and 1 in the rear) and connect the wiring harness.
- ☐ Install the power cord or remove the power cord from the cardboard sleeve on the left side of the copier.
- ☐ Lift the document cover or SDF and remove the packing.

SDF copier only:

- ☐ Install the SDF document catch tray.
- ☐ Open the copier and swing out the dry ink housing.
- ☐ If required, install the copy cartridge and push the cartridge all the way into the copier until it latches. Close the copier clamshell.
- ☐ Install the developer cartridge. Remove the plastic seal from the cartridge after you push the cartridge all the way into the copier.
- ☐ If required, unpack and shake the dry ink cartridge. Install the dry ink cartridge and remove the sealing tape on the cartridge.
- ☐ Swing in the dry ink housing and press in firmly on the green panel.
- ☐ Plug the power cord into the power receptacle and turn on the power.
- ☐ Load paper into the paper trays. Load the paper short edge feed.
- ☐ Install the output tray.
- ☐ Unfold the Bypass tray and pull out the tray extension. Set the paper guide to the width of the paper.

Run the functional check:

Both 1:1 and R/E Copier

- ☐ Position the original on the document glass
- ☐ Make 5 copies from tray 1
- ☐ Make 5 copies from tray 2 (if present)
- ☐ Place 2 sheets of paper in the Bypass tray
- ☐ Make 2 copies from the Bypass tray

R/E Copier Only

- ☐ Select paper tray 1
- ☐ Make 1 copy at 64% and check that the copy is smaller than the original
- ☐ Make 1 copy at 129% and check that the copy is larger than the original

SDF Copier Only

- ☐ Remove the original from the document glass
- ☐ Select paper tray 1
- ☐ Place 5 of the copies in the SDF feed tray
- ☐ Press the Start button and check that the sheets are fed and copied correctly

- ☐ Switch off the copier and reinstall the packing to protect the document glass.
- ☐ Remove the output tray.

SDF Copier Only

- ☐ Disconnect the copier power cord from the power outlet.
- ☐ Secure the paper tray 2 closed with tape.
- ☐ Place the copier in the original box on the bottom packing.
- ☐ Place the catch tray along side the copier and place the customer literature on top of the copier.
- ☐ Cover the copier with plastic and, if no tray 2 is present, cover with the original top packing.
- ☐ Secure the box closed with tape.

Document Cover Copier Only

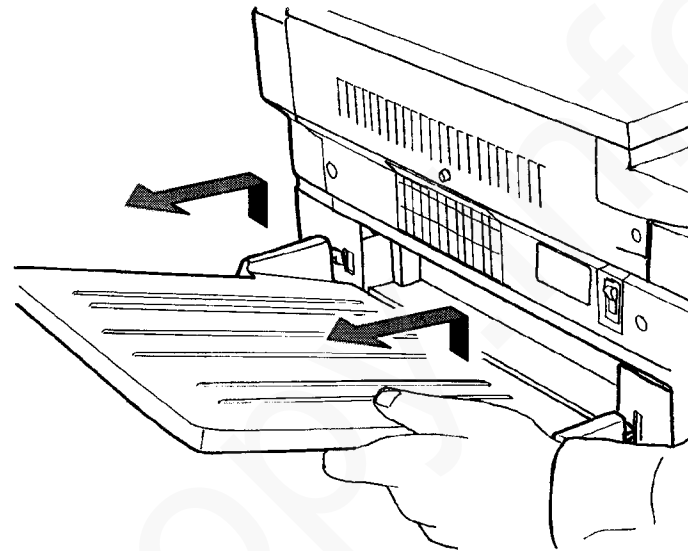
- ☐ Disconnect the copier power cord from the power outlet.
- ☐ Secure paper tray 2 closed with tape.
- ☐ Place the copier in the original box on the bottom packing.
- ☐ Place the catch tray along side the copier and place the customer literature on top of the copier.
- ☐ Cover the copier with plastic and, if no tray 2 is present, cover with the original top packing.
- ☐ Secure the box closed with tape.

Commissioning Checklist

- ☐ Check the customer site for adequate space for the copier.
- ☐ Check the receptacle polarity at the customer site.
- ☐ Unpack the Cabinet Stand (if supplied).
- ☐ Install on cabinet stand or customer stand.
- ☐ Plug in the power cord and turn on the copier.
- ☐ Install the output tray.
- ☐ Perform the Functional Check.
- ☐ Give Customer the Product Demonstration.
- ☐ Apply the second language Fault Code label if required.
- ☐ Obtain the copy counter reading.
- ☐ Complete the Installation.

Relocation of Copier

1. Check the new site for the proper space requirements and for the proper electrical requirements.
2. Switch off the copier.
3. Remove the output catch tray (Figure 1).



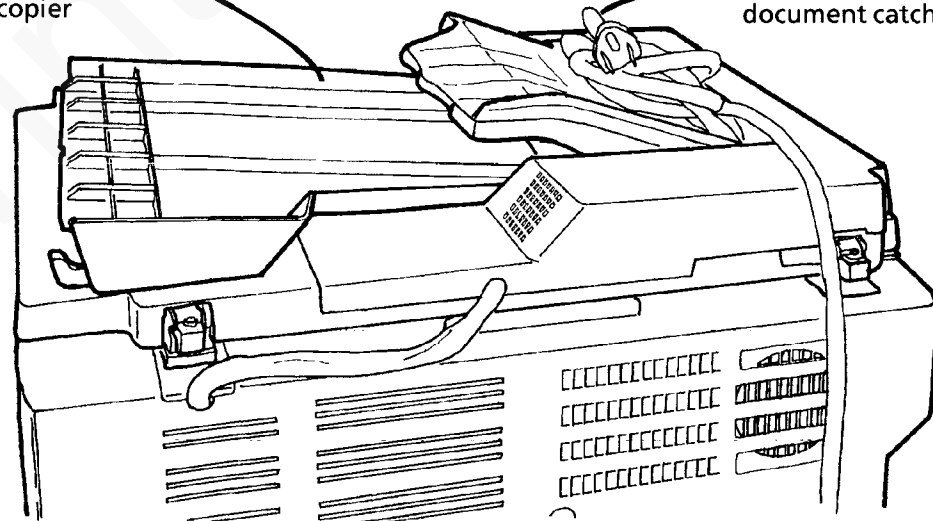
0D018B

Figure 1.

4. Disconnect the copier power cord from the power outlet.
5. Position the Output Tray upside down on the copier (Figure 2).
6. Position the power cord on the copier (SDF shown) (Figure 2).
7. Move the copier to its new location.
8. Check the Copier Level (ADJ 1.1).
9. Reinstall the Output Tray.
10. Connect the copier power cord to the power outlet.

Output catch tray on top of copier

Power cord in document catch tray



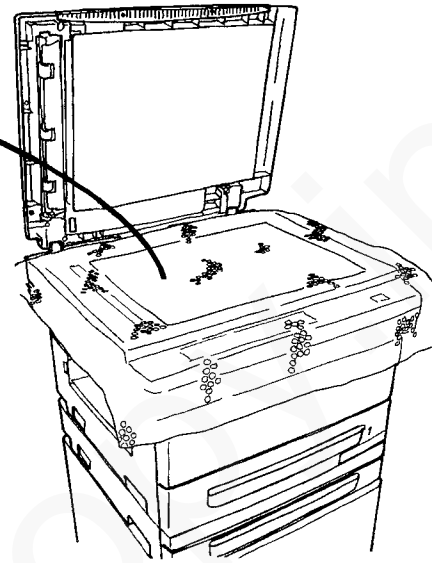
0D064A

Figure 2.

Removal

1. Switch off the copier. Disconnect the power cord.
2. Secure packing material over the Document Glass with tape (Figure 1).

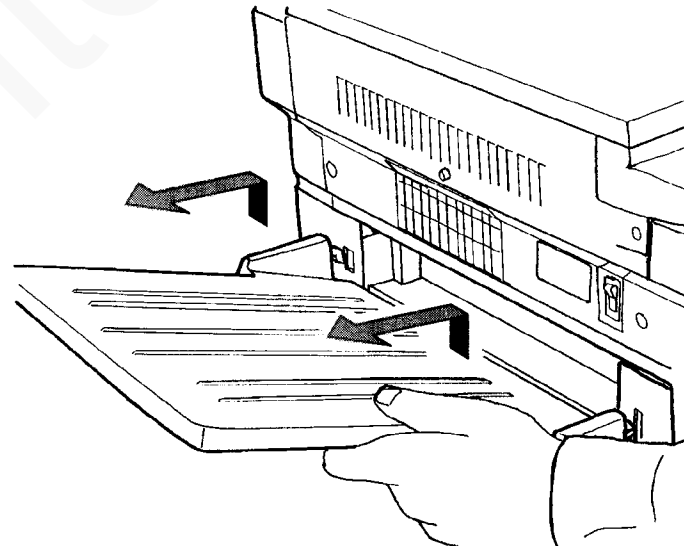
Packing Material



0D096A

Figure 1.

3. Remove the Output Tray (Figure 2).

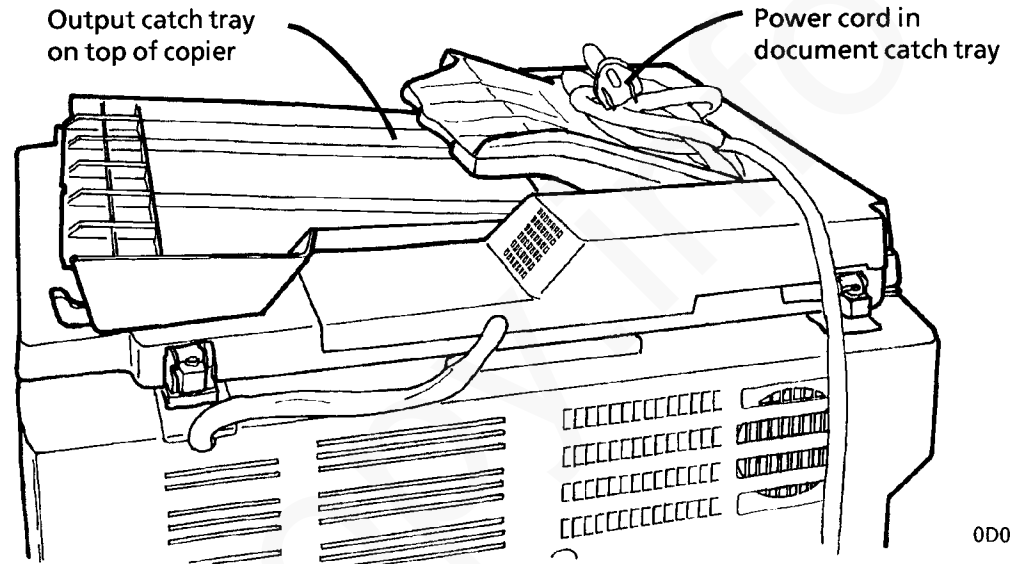


0D018B

Figure 2.

SDF Copier Only

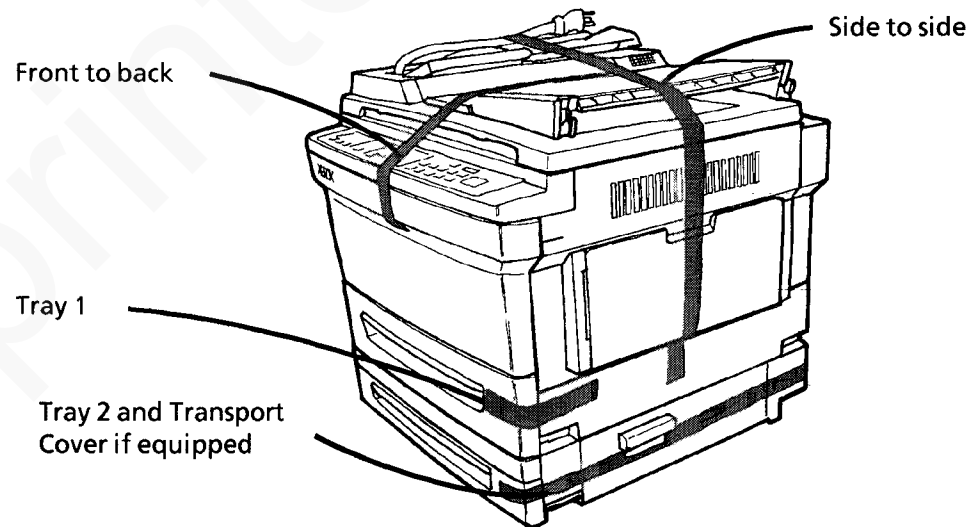
1. Position the Output Tray upside down on the top of the copier.
2. Position the power cord in the Document Tray (Figure 1).



0D064A

Figure 1.

3. Secure the copier components (Figure 2).
 - a. Secure the Front Door and Output Tray with one piece of tape that runs from front to back.
 - b. Secure the bypass tray and power cord with one piece of tape running sideways across the top of the copier.
 - c. Secure the paper tray with tape.
 - d. Secure Tray 2 and the Transport Cover closed (if equipped).

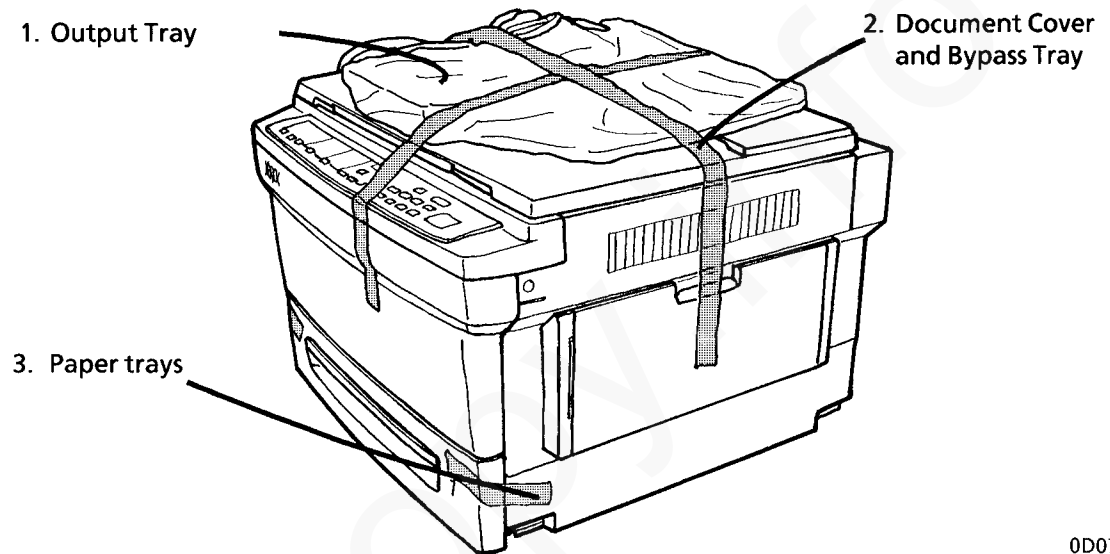


0D065A

Figure 2.

Document Cover Copier Only

1. Secure the copier components (Figure 1).
 - a. Wrap the output catch tray in bubble wrap and position it on top of the copier
 - b. Secure the power cord and Output Tray with tape.
 - c. Secure the front door with tape.
 - d. Secure the Document Cover on the right side with tape.
 - e. Secure the paper trays with tape.



0D072B

Figure 1.

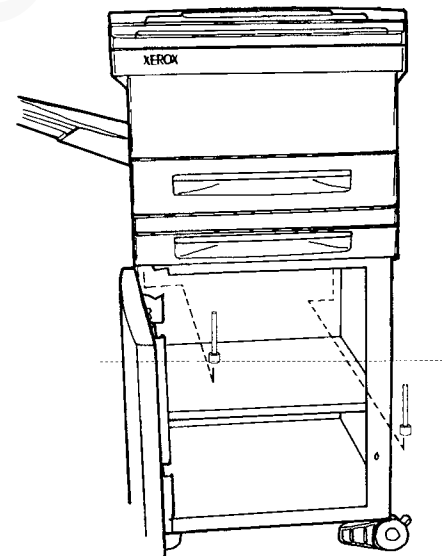
Remove from Cabinet Stand (if present)

WARNING

The copier is heavy. Two people are required to lift it. If special care is not used when lifting the copier, personal injury or damage to the copier could occur.

1. If there is a cabinet stand, remove the two thumbscrews and lift the copier off the stand (Figure 2). If the customer does not want the cabinet stand, remove the cabinet stand from the customer site.

Thumbscrews

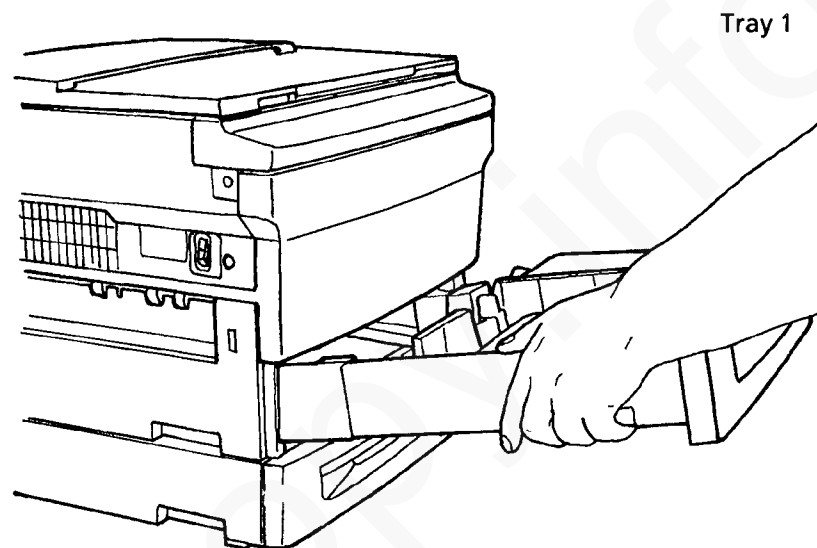


0D077A

Figure 2.

Remove Copier from Second Tray Module

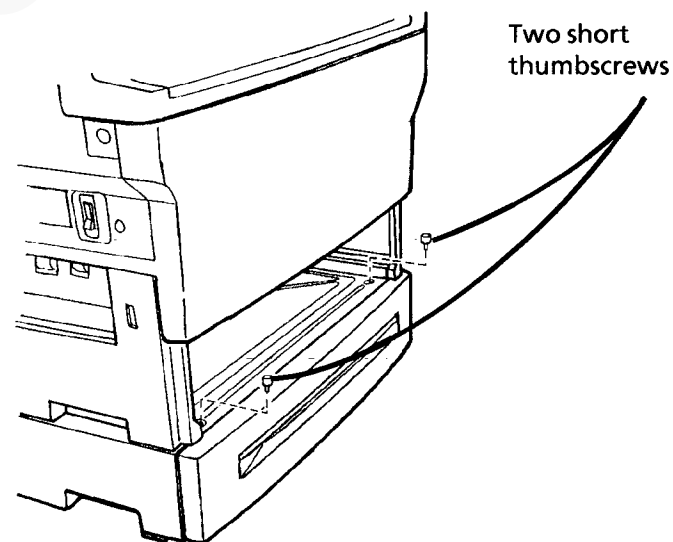
1. Remove the tape and remove Tray 1 from the copier by tipping the front upwards and pulling it out completely (Figure 1).



0D053A

Figure 1.

2. Remove the two short thumbscrews that secure the Tray 2 to the copier (Figure 2).



0D054A

Figure 2.

3. Remove the tape and open the front door on the copier (Figure 1).

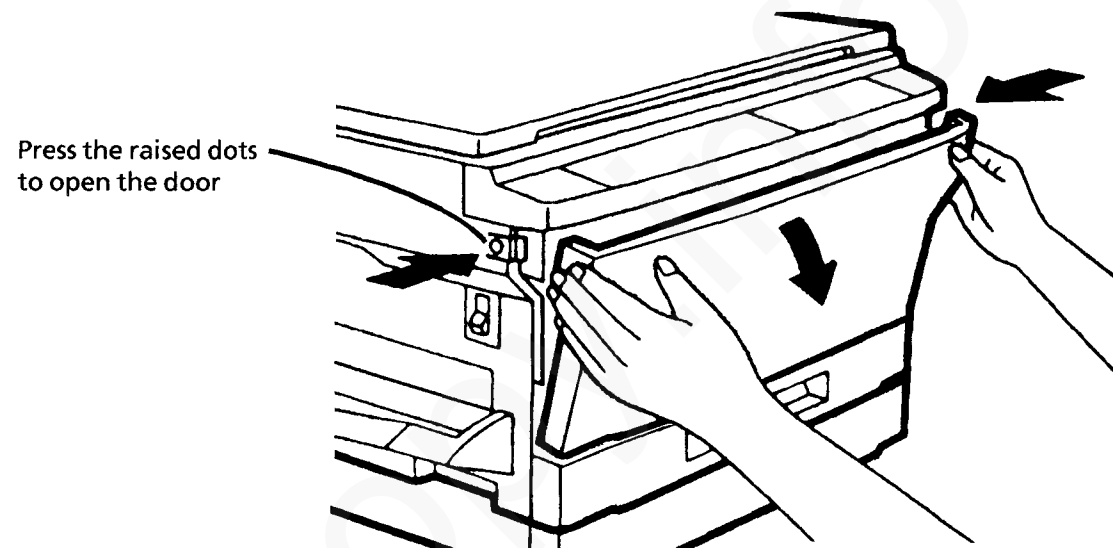


Figure 1.

4. Open the copier (Figure 2).

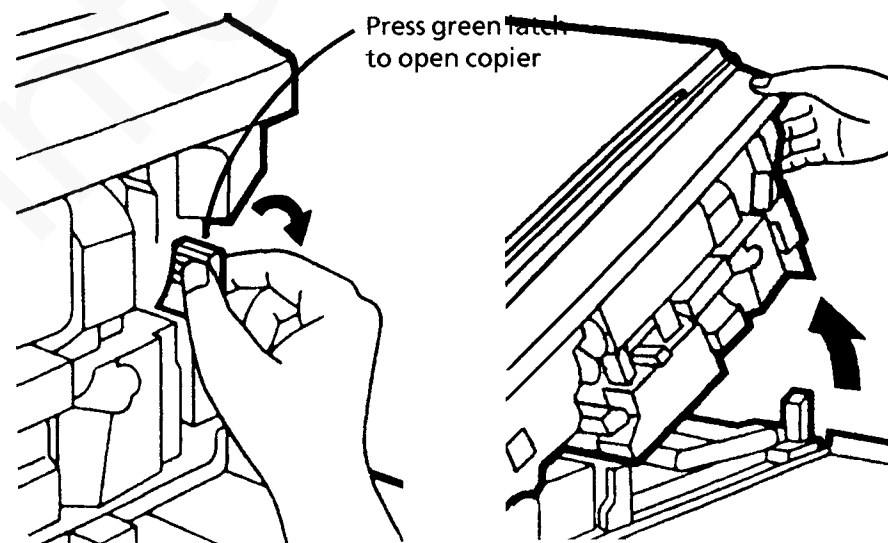


Figure 2.

5. Remove the long thumbscrew at the right rear corner of the copier (Figure 1).

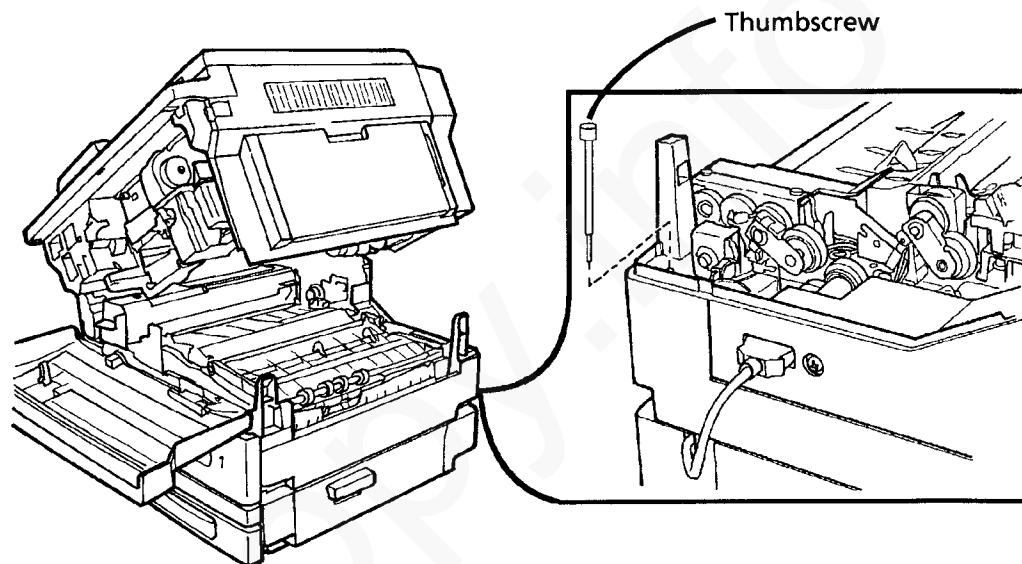


Figure 1.

6. Disconnect the wiring harness (Figure 2).

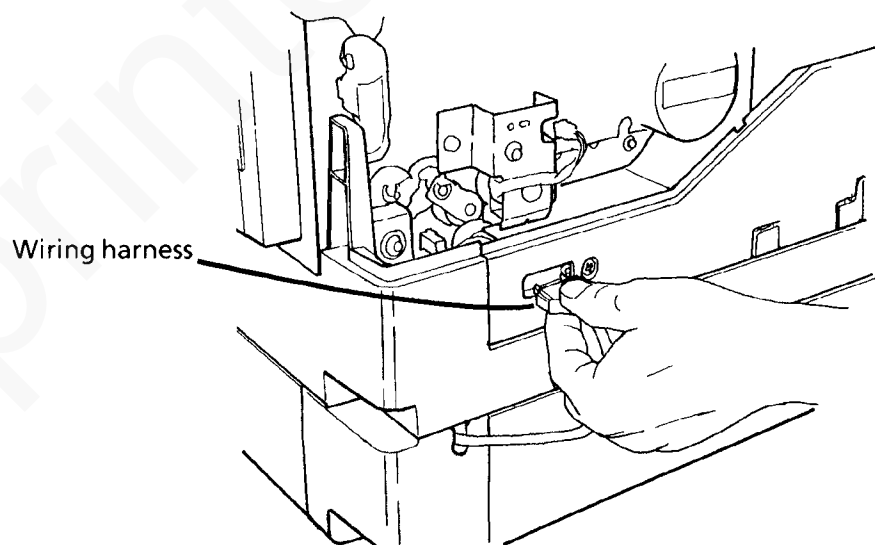


Figure 2.

7. Lift the copier off the second tray module (Figure 1).

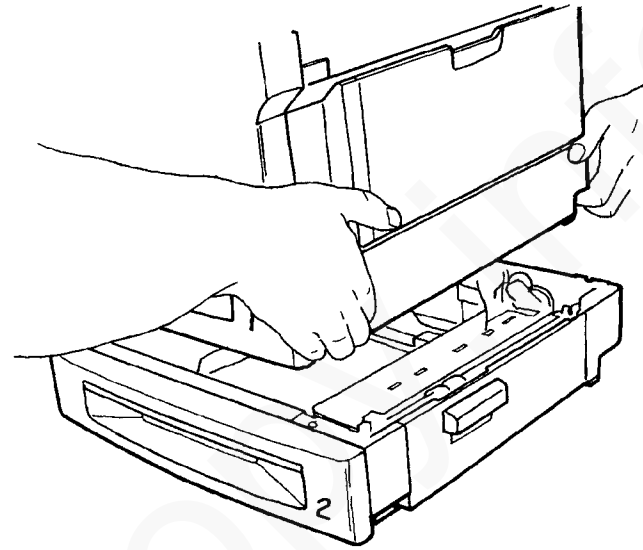


Figure 1.

Continue to Prepare the Copier for Removal

1. Swing out the Dry Ink Cartridge and remove it (Figure 2).

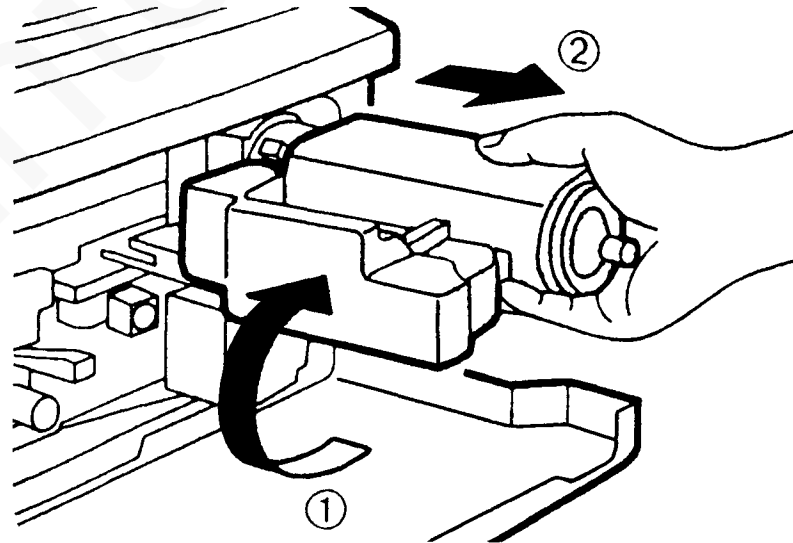


Figure 2.

2. Insert the sealing caps to prevent leakage of the dry ink (Figure 1).

Sealing Caps

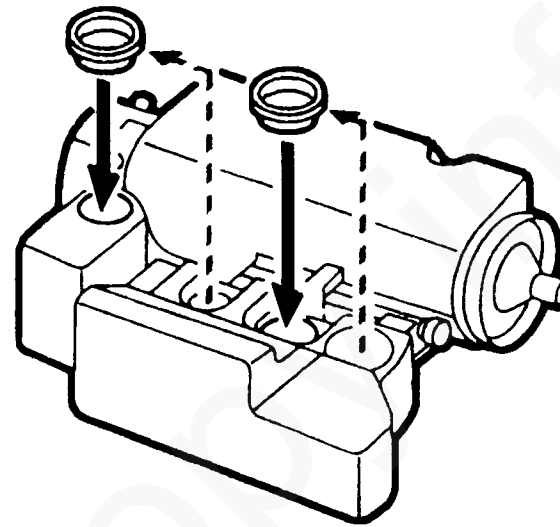
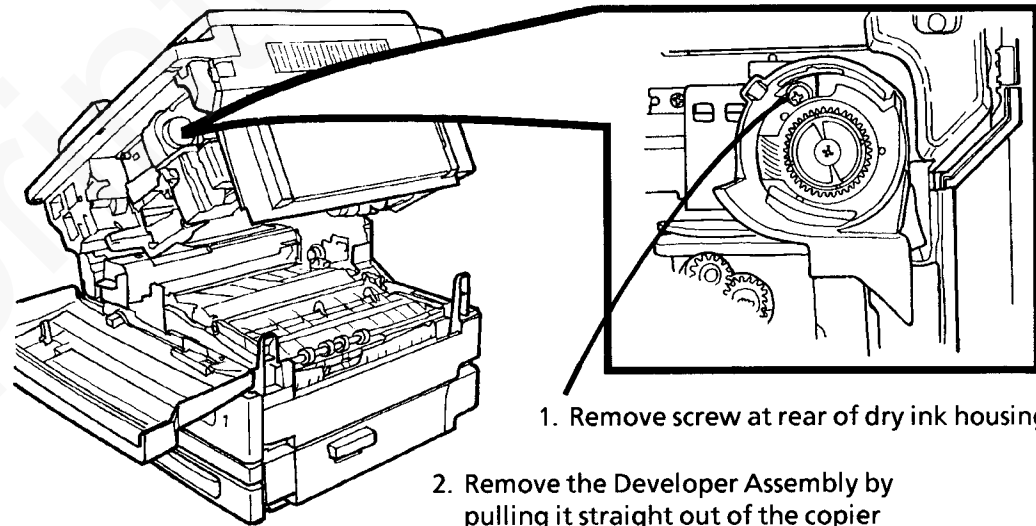


Figure 1.

4. Remove the Developer Assembly (Figure 2).



1. Remove screw at rear of dry ink housing

2. Remove the Developer Assembly by pulling it straight out of the copier

Figure 2.

5. Secure the Developer Assembly (Figure 1).
 - a. Place the Developer Assembly in a bag and seal the bag.
 - b. Wrap the Developer Assembly with packing material. Secure with tape.

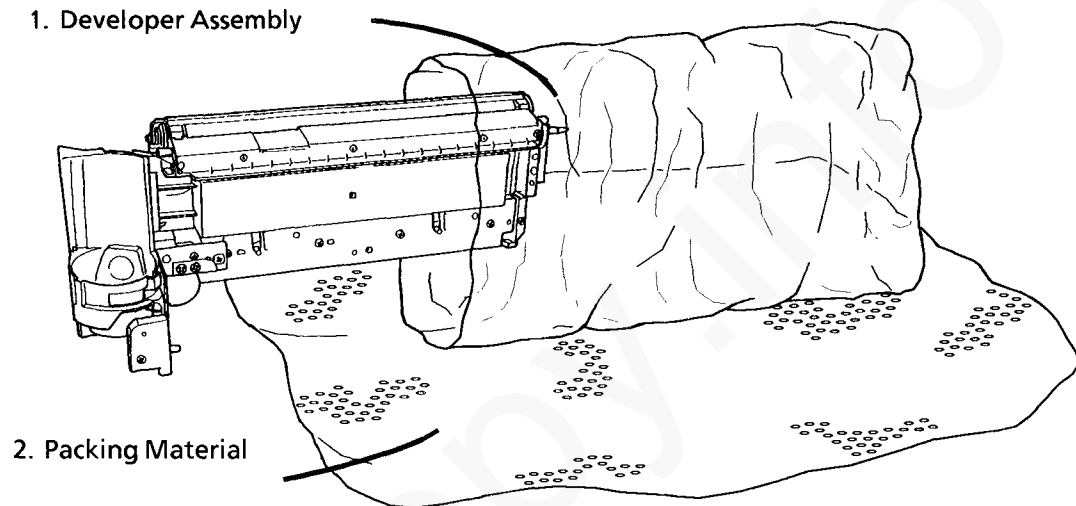


Figure 1.

6. Close the copier and secure the covers with tape.

Relocation/Removal Checklists

Relocation of Copier

- ☐ Check polarity at new site.
- ☐ Switch off copier.
- ☐ Remove the output tray and position it on top of copier.
- ☐ Unplug power cord and position it on top of copier.
- ☐ Move the copier to the new site.
- ☐ Check the Copier Level (ADJ 1.1).
- ☐ Reinstall the output catch tray.
- ☐ Connect the copier power cord to an outlet and turn the copier on.

Removal of Copier

- ☐ Obtain a copy counter reading.
- ☐ Switch off copier.
- ☐ Secure packing material over the document glass with tape.
- ☐ Remove the output tray.

SDF Copier Only

- ☐ Put the output tray upside down on the top of the copier.
- ☐ Disconnect the copier power cord from the power outlet and put it in the document catch tray.
- ☐ Tape the front door and across the top of the copier front to back.
- ☐ Secure the Bypass tray and power cord with tape running side to side.
- ☐ Secure the paper trays and tray 2 transport cover closed with tape.
- ☐ Remove the copier from the cabinet stand if one is present.
- ☐ Move the copier to the warehouse.

Document Cover Copier Only

- ☐ Wrap the output tray in packing material and tape it to the top of the copier.
- ☐ Secure the front door the Document Cover closed with tape.
- ☐ Secure the paper trays closed with tape.
- ☐ Remove the copier from the cabinet stand if one is present.
- ☐ Move the copier to the warehouse.
- ☐ **SDF copiers only:** Remove the SDF Exit Tray and tape to output tray.
- ☐ **With Tray 2 module only:** Remove the copier from the Tray 2 module.
 - ☐ Remove tray 1 and remove the two short thumbscrews that secure the copier to the tray 2 module.
 - ☐ Open the copier and remove the long thumbscrew at the right rear that secures the copier to the Tray 2 module.
 - ☐ Disconnect the wiring harness.
 - ☐ Lift the copier off of the Tray 2 module.
- ☐ Remove the dry ink cartridge, insert the sealing caps and discard the used cartridge.
- ☐ Remove the developer housing assembly, place in a plastic bag, and wrap with packing material.

- ☐ Secure the copier to a suitable pallet with strapping. Run the strapping front to back and inside the hinges on the SDF or document cover. Ensure the strapping is not run over the registration area at the left end of the document glass.
- ☐ Wrap the second tray in packing material and place in a box, or stand the tray upright against the left side of the copier and secure with filament tape.
- ☐ Place the output tray on top of the copier and secure with tape.
- ☐ Place the developer assembly, wrapped in packing material, at the right rear of the copier and secure with tape.
- ☐ Attach coding labels and tracings to the copier.
- ☐ Position the the stand on its back on a pallet and secure with strapping.
- ☐ Attach coding labels and tracings.

5614F Service Log

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ACCOUNT INFORMATION

(PLEASE PRINT)

Circle Model Number:

5614 R/E 5114

5614 1:1 5113

Special Message:

MACHINE SERIAL NUMBER: _____

NUMBER OF COPIES ON FAILED COPY CARTRIDGE: _____

COPY CARTRIDGE PART NUMBER: (Located at Top of Bar Code Label) 113R _____

COPY CARTRIDGE SERIAL NUMBER: (Located at Bottom of Bar Code Label) CR _____

SERVICE REPRESENTATIVE INFORMATION

(PLEASE PRINT)

NAME: _____ EMP. NO.: _____

DISTRICT NO.: _____ DATE: _____

DEFECT DESCRIPTIONS

<input type="checkbox"/> DELETIONS, LEAD EDGE TO TRAIL EDGE	<input type="checkbox"/> DRY INK LEAKAGE, DEVELOPER BEAD CARRY OVER	<input type="checkbox"/> LIGHT IMAGE
<input type="checkbox"/> DELETIONS (OTHER)	<input type="checkbox"/> BACKGROUND, BACKGROUND BAND	<input type="checkbox"/> UNEVEN DENSITY
<input type="checkbox"/> NO DRIVES	<input type="checkbox"/> COUNTER/CRUM MALFUNCTION	<input type="checkbox"/> D.O.A.
<input type="checkbox"/> SPOTS, SCRATCHES, OIL, GLUE	<input type="checkbox"/> SYSTEM FAULTS	<input type="checkbox"/> DEFECTIVE DRUM GROUND
<input type="checkbox"/> PHYSICAL DAMAGE <small>Please Explain in Comment Area</small>	<input type="checkbox"/> OTHER/COMMENTS _____	
<input type="checkbox"/> MACHINE INDUCED DAMAGE <small>Please Explain in Comment Area</small>	_____	
<input type="checkbox"/> CLEANING STREAKS	_____	
<input type="checkbox"/> FUZZY IMAGE	_____	

INSERT PROPERLY COMPLETED FORM AND COPY QUALITY SAMPLES INTO COPY CARTRIDGE BOX. INDICATE LEAD EDGE AND PAGE ORDER

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CL1 SDF Registration Clutch	1	7-3	S1 Main Power Switch	7	7-6	CND Main PWB	2	7-4
CL2 Tray 1 Feed Clutch	3	7-4	S2 Interlock Switch	7	7-6	CND Lower PWB	3	7-4
CL3 Tray 2 Feed Clutch	4	7-5	S3 SDF Interlock Switch	1	7-3			
CL4 Feed/Transport Clutch	2	7-4	S4 Fuser Thermostat	5	7-5	CNE Main PWB	2	7-4
						CNE Lower PWB	3	7-4
MOT1 Main Motor	2	7-4	SOL1 SDF Nudger Solenoid	1	7-3	CNE Input Power PWB	6	7-5
MOT2 SDF Motor	1	7-3	SOL2 Bypass Feed Solenoid	9	7-7			
MOT3 Tray 1 Lift Motor	3	7-4	SOL3 Bypass Nudger Solenoid	9	7-7	CNF Lower PWB	3	7-4
MOT4 Lens Drive Motor	2	7-4	SOL4 Stripper Finger Solenoid	2	7-4			
MOT5 Scan Drive Motor	2	7-4				CNF Main PWB	2	7-4
MOT6 SDF Optics Fan	2	7-4				CNG Main PWB	2	7-4
MOT7 Optics Cooling Fan	2	7-4				CNH Main PWB	2	7-4
MOT8 Fuser Cooling Fan	7	7-6				CNI Main PWB	2	7-4
MOT9 Fuser Cooling Fan	7	7-6				CNJ Main PWB	2	7-4
MOT10 Dry Ink Motor	11	7-8						
						CN1 Main Motor PWB	2	7-4
						CN2 Main Motor PWB	2	7-4

Terminal / Component	Figure	Page
BIAS Lower PWB	3	7-4
CGR(BK) Input Power PWB	6	7-5
WH(BK) Input Power PWB	6	7-5
YE(BK) Input Power PWB	6	7-5
YE(WH) Input Power PWB	6	7-5
GND Input Power PWB	6	7-5
WH(WH) Input Power PWB	6	7-5
BK(BK) Input Power PWB	6	7-5
WH(BK) Input Power PWB	6	7-5

Connector (intermediate)	Figure	Page
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J1	7	7-6
J2	7	7-6
P/J3	5	7-5
P/J4	5	7-5
J5	7	7-6
J6	7	7-5
J7	6	7-5
J8	5	7-6
J9	5	7-6
J10	2	7-4
J11	2	7-4
J12	5	7-5
J13	5	7-5
J14	3	7-4
J15	4	7-5
J16	10	7-8
J17	10	7-8

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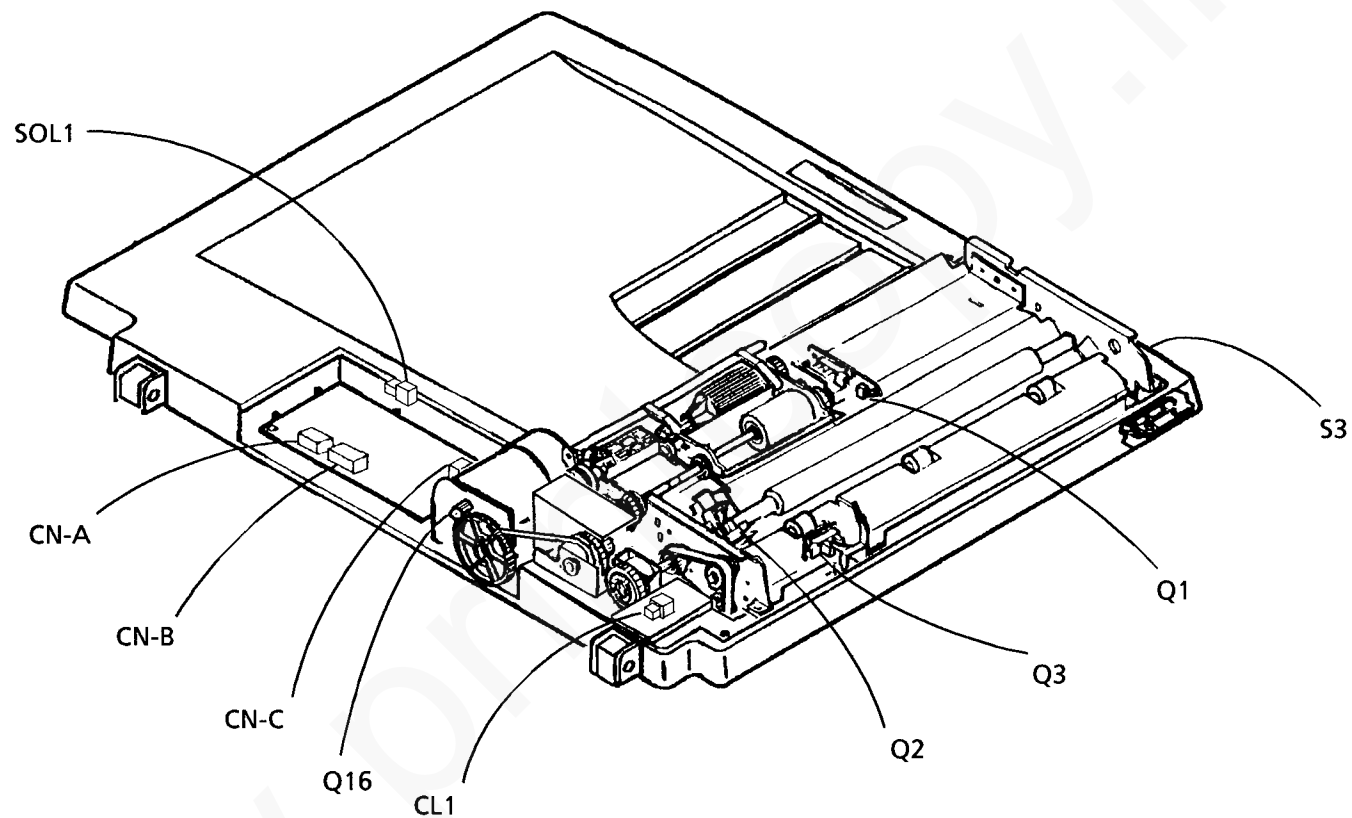


Figure 1. SDF

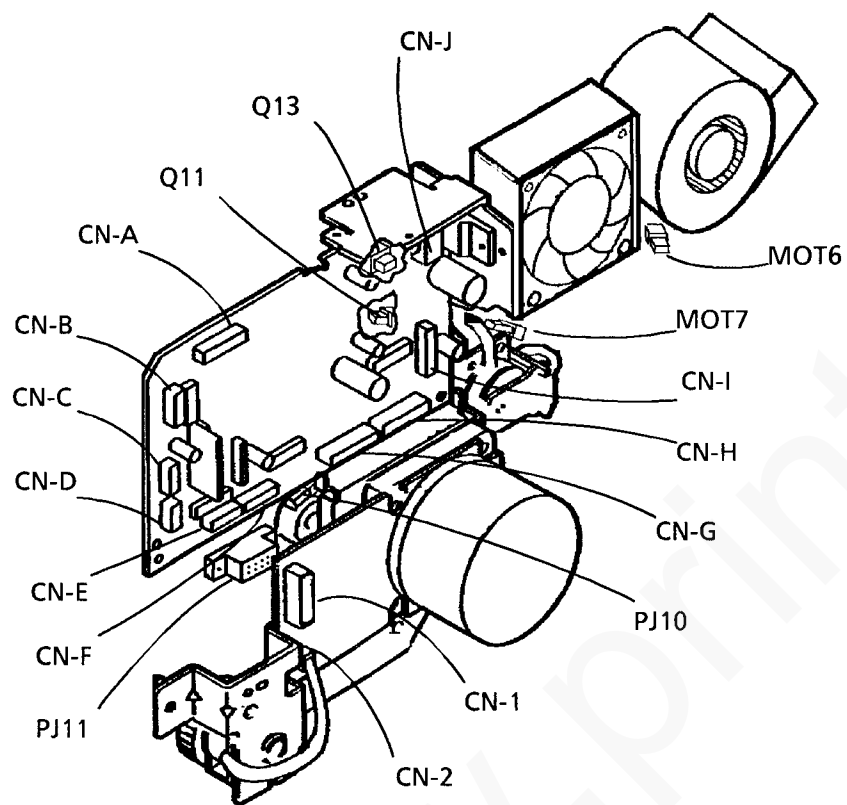


Figure 2. Upper Rear Frame Components

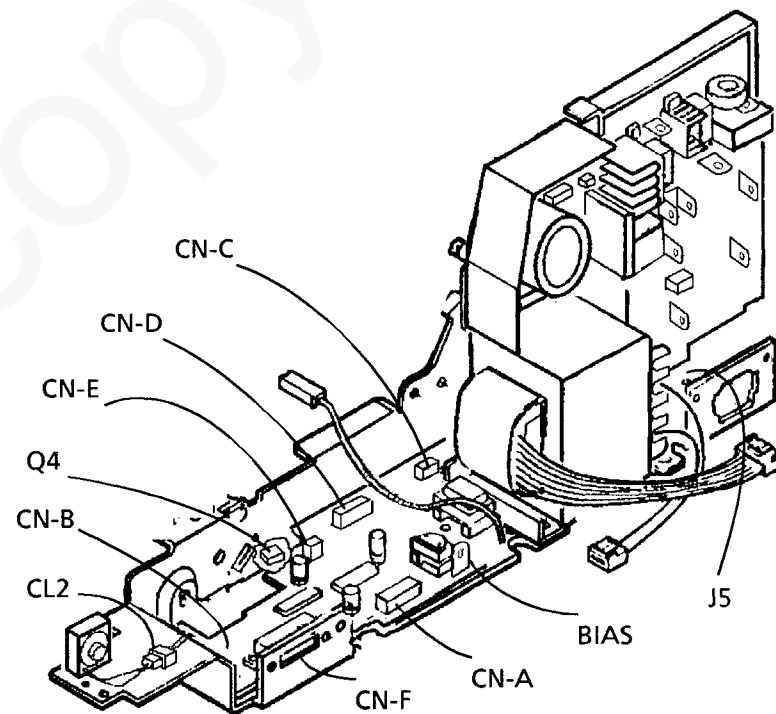


Figure 3. Lower PWB

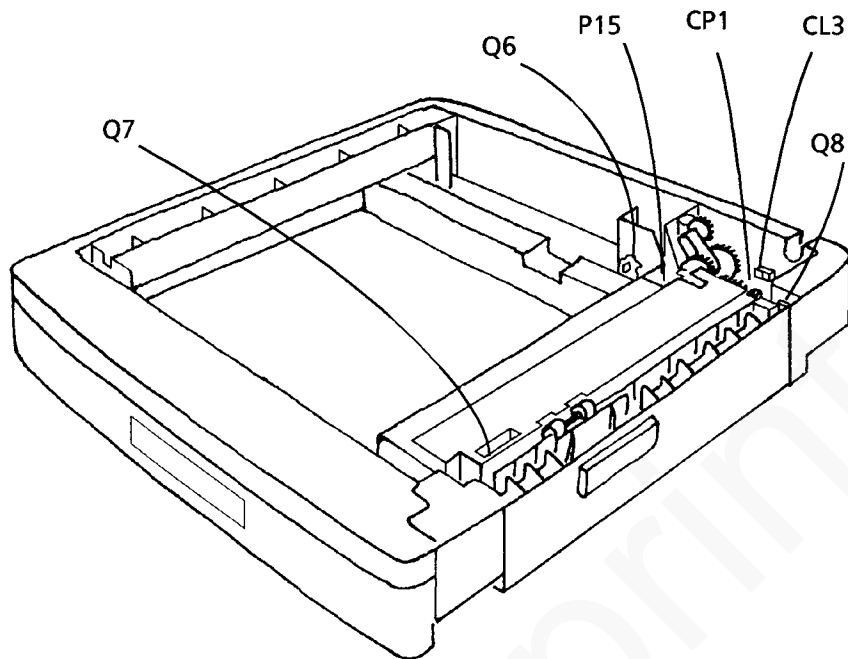


Figure 4. Tray 2

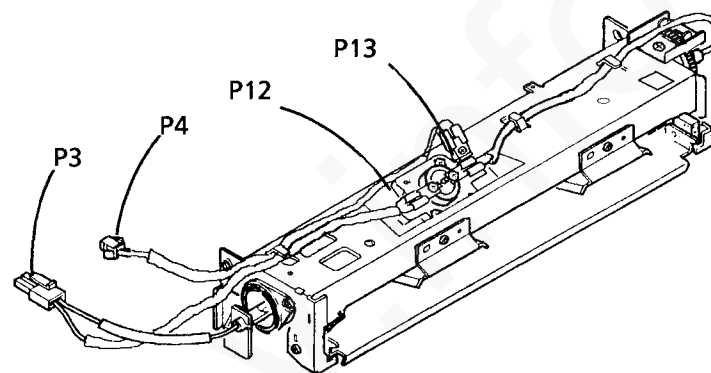


Figure 5. Fuser

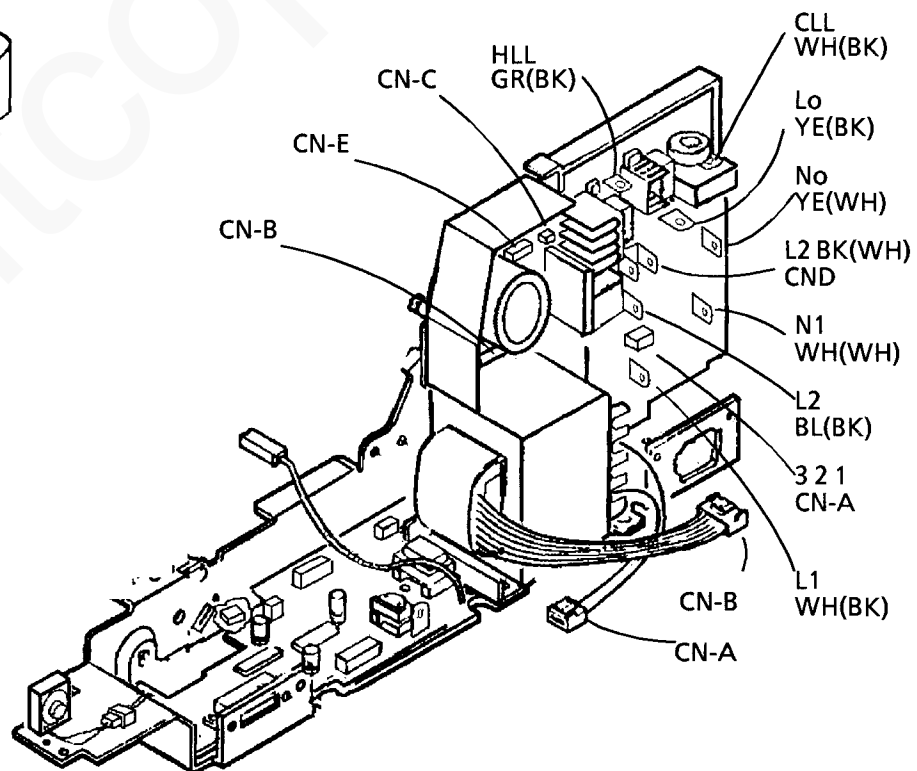


Figure 6. Input Power PWB

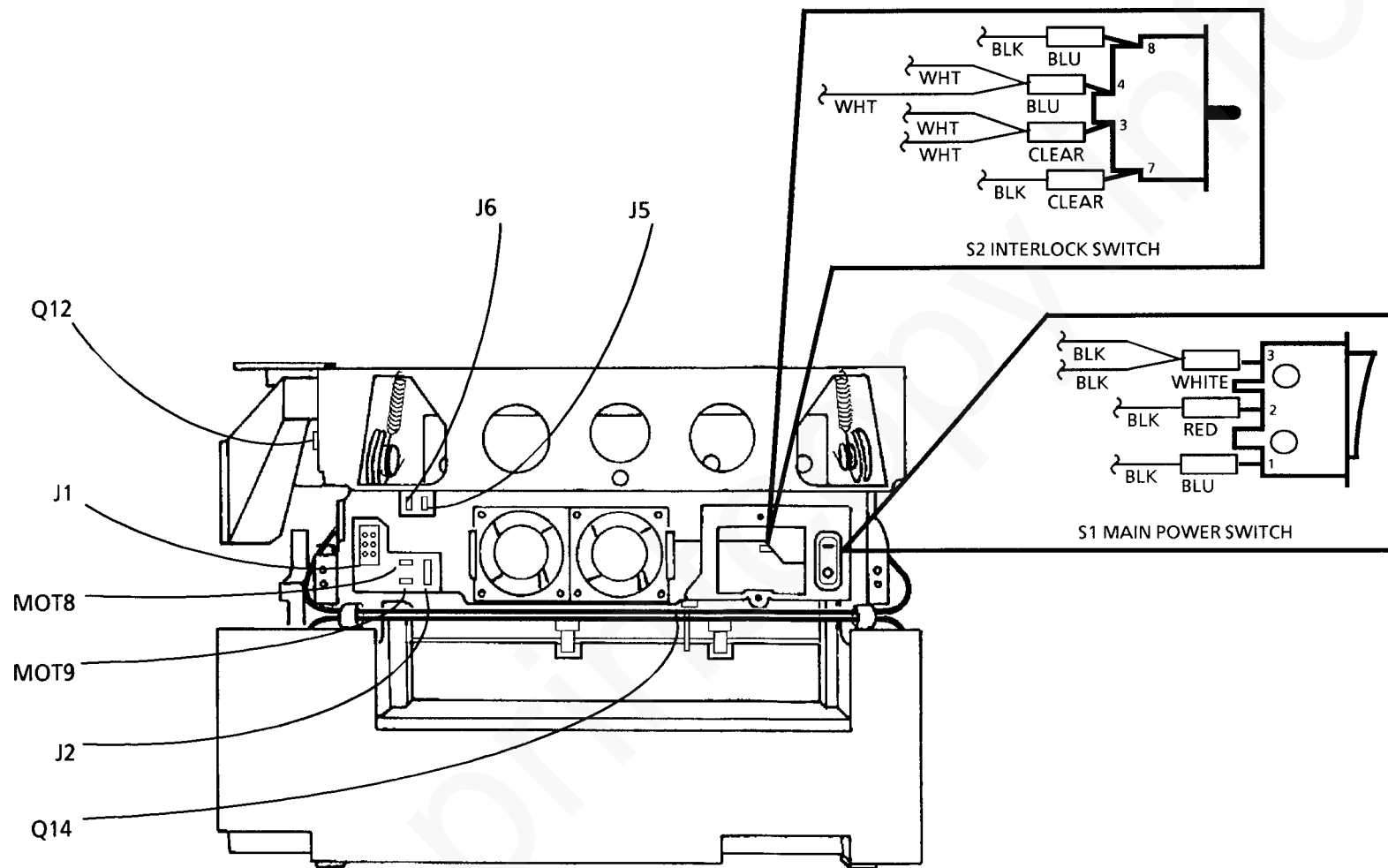


Figure 7. Left Side

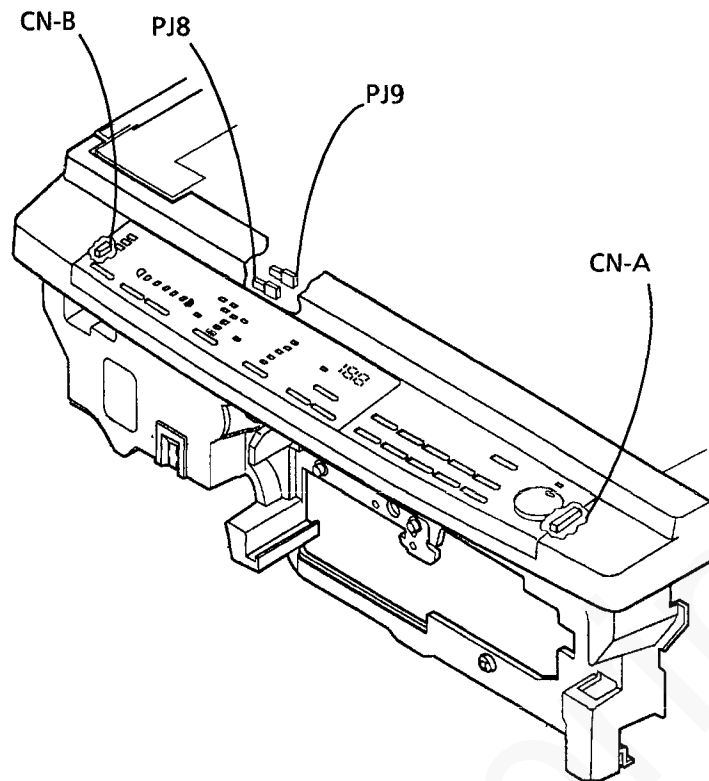


Figure 8. Control Console

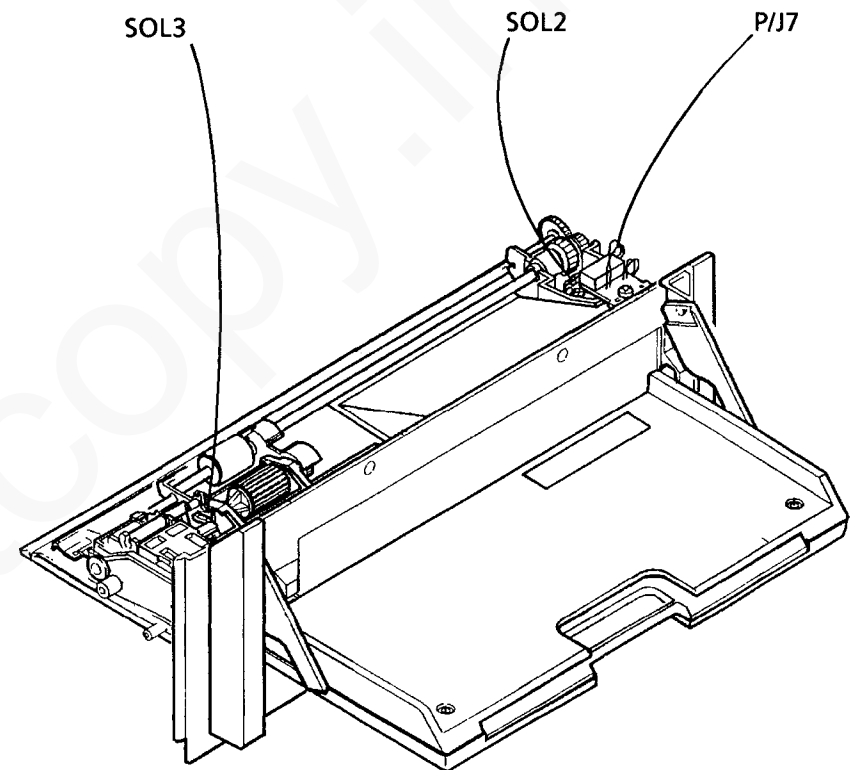


Figure 9. Bypass Feeder

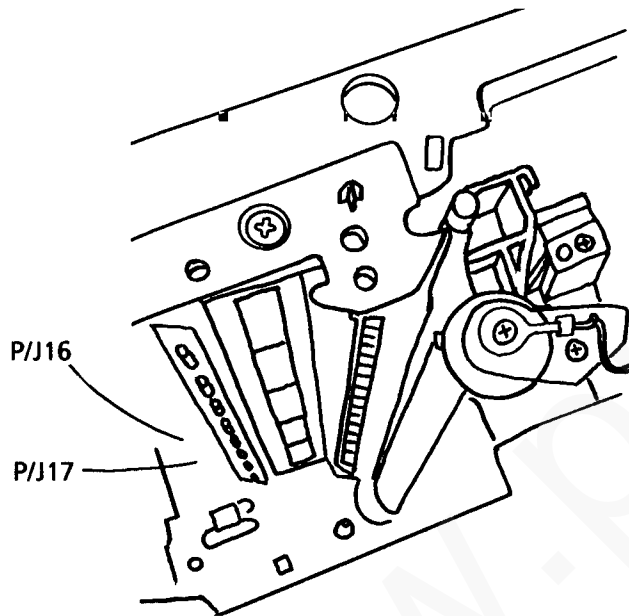


Figure 10. Copy Cartridge Cavity

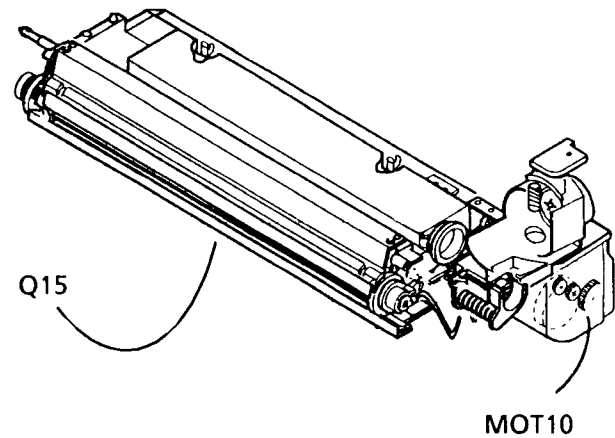
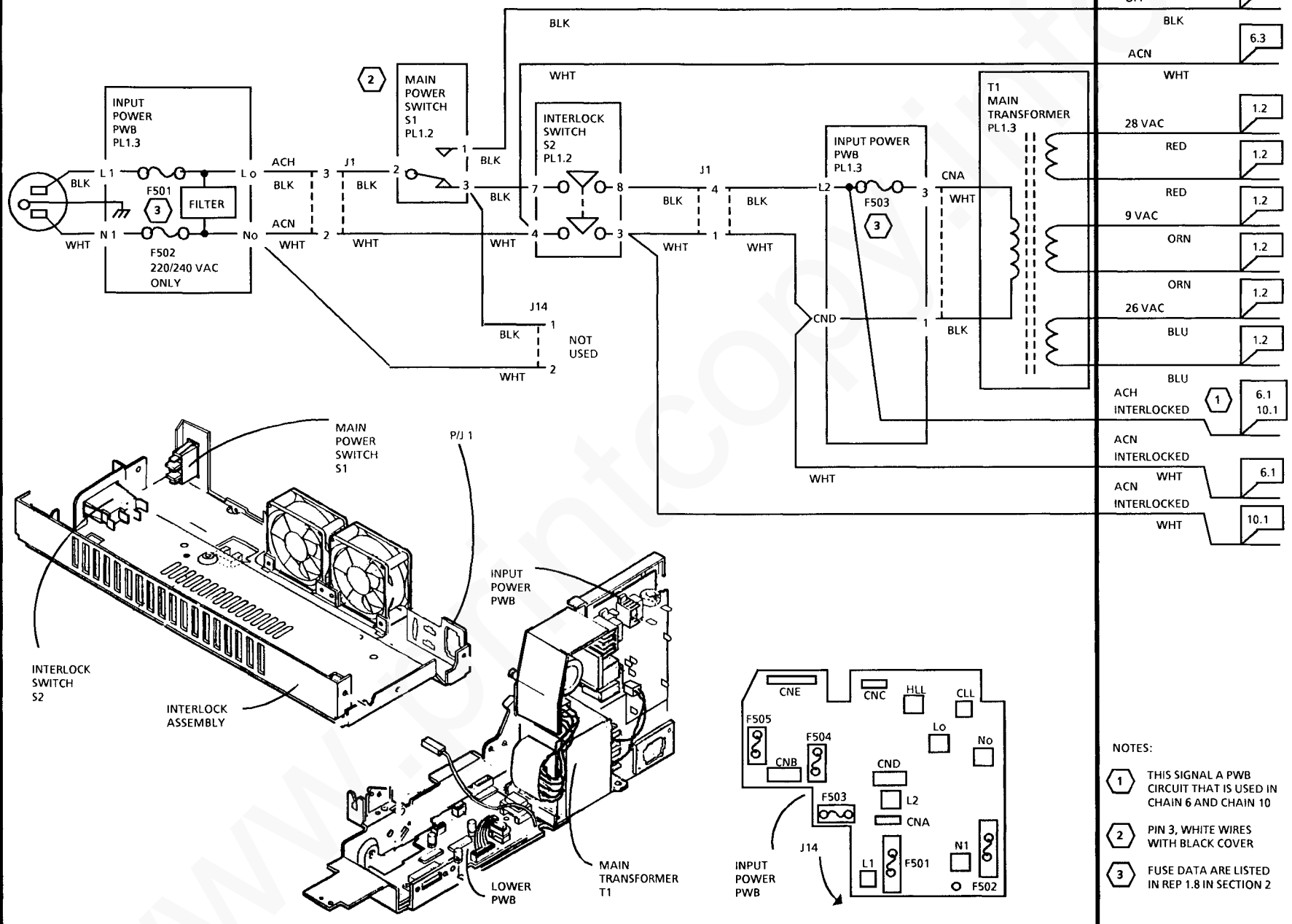
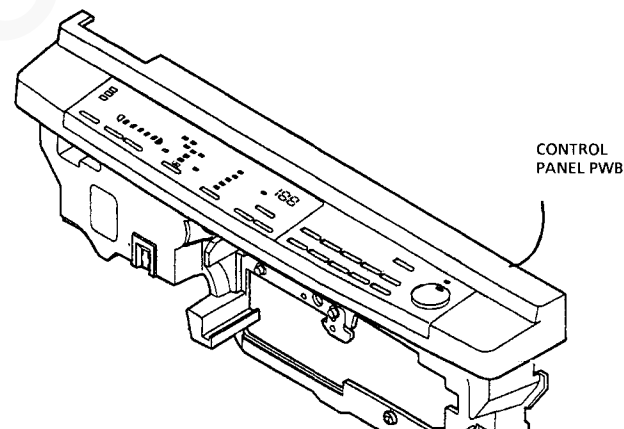
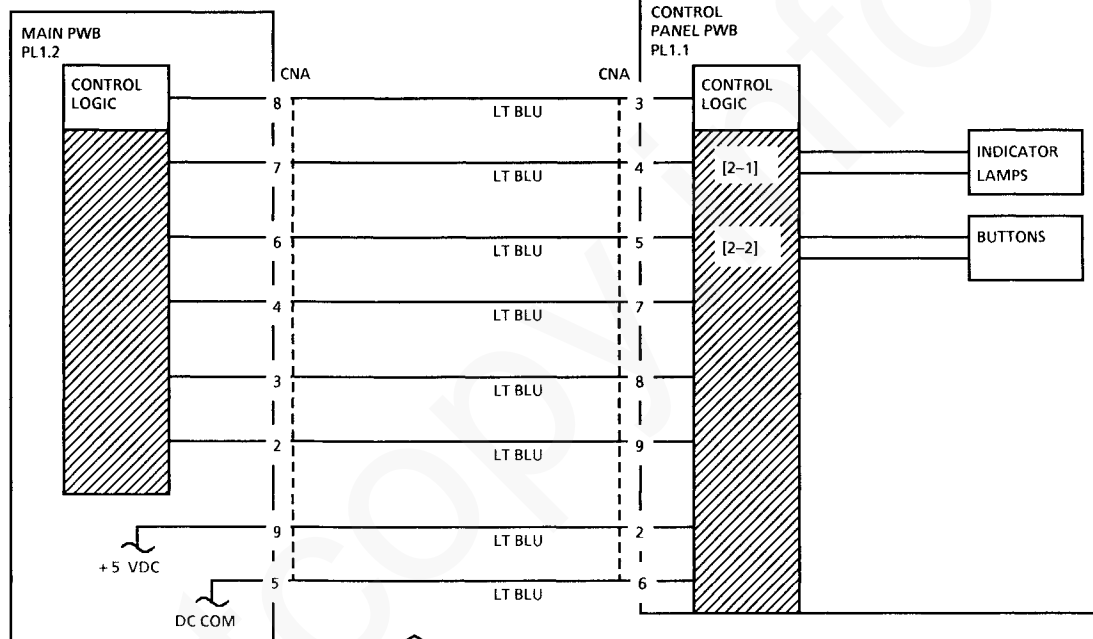


Figure 11. Developer Assembly

1.1 AC POWER, 50/60 Hz

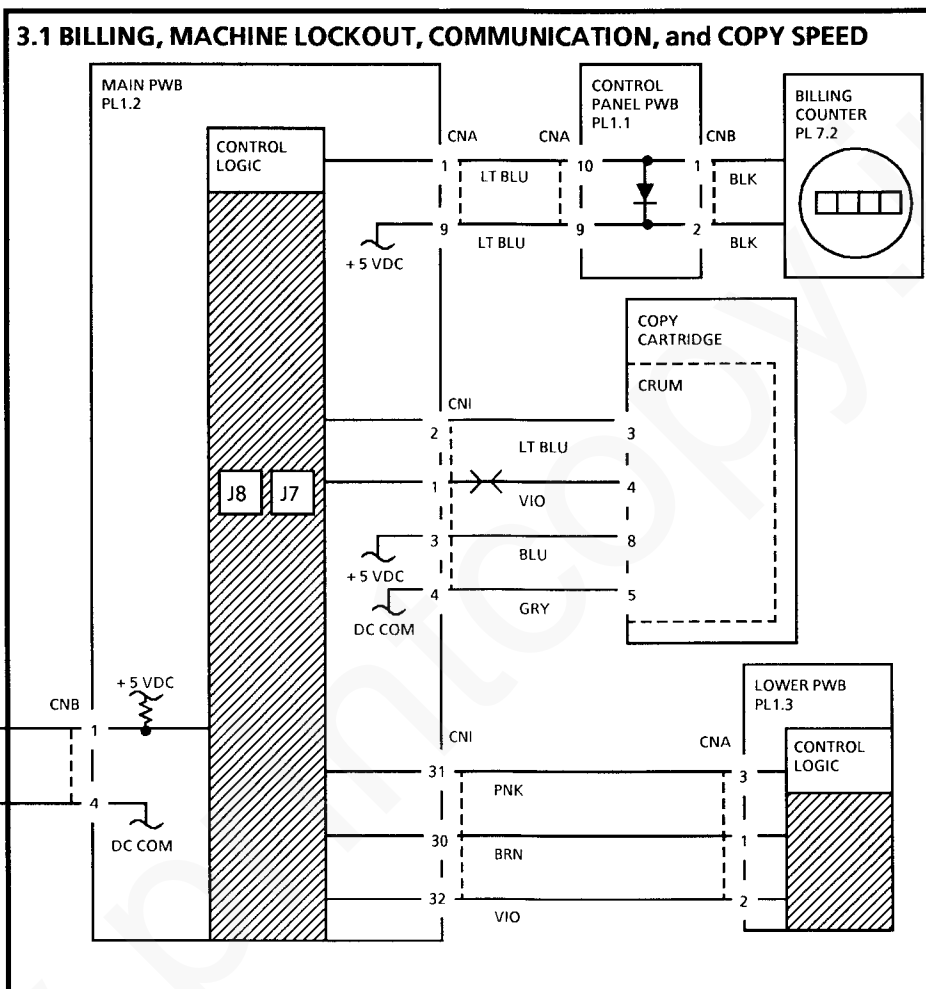


2.1 SELECTION/INDICATION



INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
DC COM	JP 2	1.2



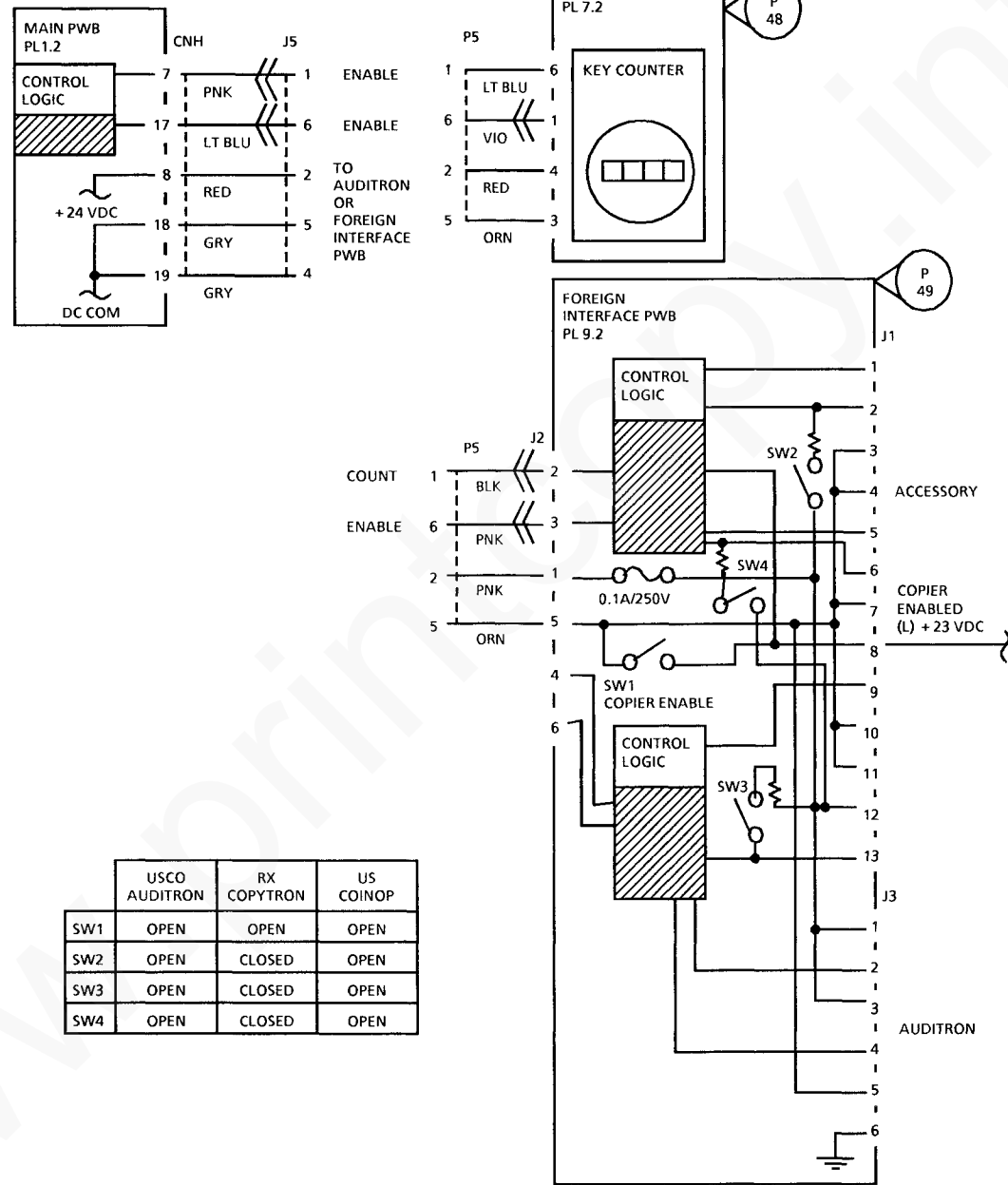
INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
+ 24 VDC	JP 3	1.2
DC COM	JP 2	1.2

NOTES:

- 1 THE COPY SPEED SLOWS TO 6 CPM WHEN THE SDF OR DOCUMENT COVER IS OPEN

3.2 AUDITRON / COIN - OP ACCESSORY

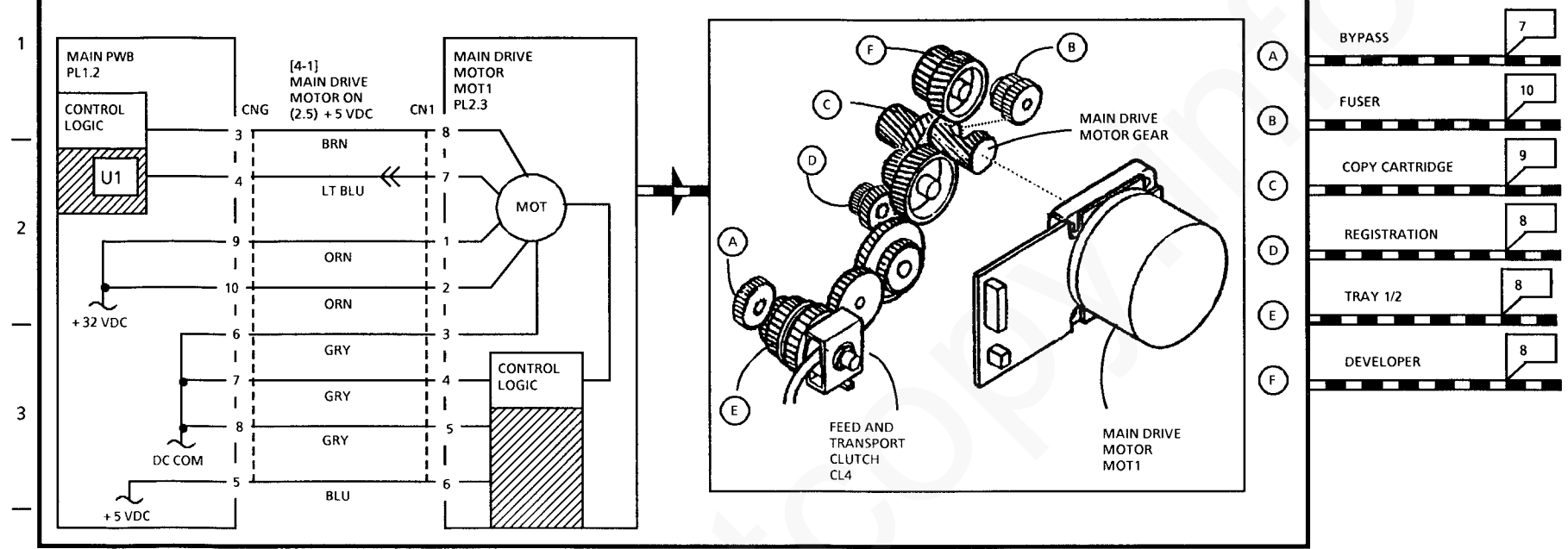


INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
+ 24 VDC	JP 3	1.2
DC COM	JP 2	1.2

	USCO AUDITRON	RX COPYTRON	US COINOP
SW1	OPEN	OPEN	OPEN
SW2	OPEN	CLOSED	OPEN
SW3	OPEN	CLOSED	OPEN
SW4	OPEN	CLOSED	OPEN

4.1 MAIN DRIVE MOTOR CONTROL



INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
+ 32 VDC	JP 47	1.2
DC COM	JP 2	1.2

5.1 DOCUMENT INPUT

The diagram illustrates the wiring for the document input system. It includes the following components and connections:

- MAIN PWB PL1.2:**
 - Pin 2 (CNB) is connected to +5 VDC.
 - Pin 4 (GRY) is connected to DC COM.
- SDF PWB PL8.1:**
 - Pin 2 (CNB) is connected to +5 VDC.
 - Pin 4 (GRY) is connected to DC COM.
- DOCUMENT PRESENT SENSOR Q1 PL8.2:**
 - Pin 3 (BLU) is connected to the sensor's BLU terminal.
 - Pin 1 (GRY) is connected to the sensor's GRY terminal.
- SDF EXIT SENSOR (1):**
 - Pin 8 (CNB) is connected to the sensor's BLU terminal.
 - Pin 10 (DC COM) is connected to the sensor's GRY terminal.
- SDF PWB PL8.1 (continued):**
 - Pin 13 (CNB) is connected to the sensor's BLU terminal.
 - Pin 10 (DC COM) is connected to the sensor's GRY terminal.
- SDF INTERLOCK SWITCH S3 PL8.1:**
 - Pin 2 (BLU) is connected to the switch's BLU terminal.
 - Pin 1 (BLU) is connected to the switch's BLU terminal.
- CONTROL LOGIC:**
 - Pin 12 (CNB) is connected to the control logic's BLU terminal.
 - Pin 1 (CNA) is connected to the control logic's BLU terminal.
- MAIN PWB PL1.2 (continued):**
 - Pin 1 (+5 VDC) is connected to the control logic's BLU terminal.
 - Pin 1 (CNB) is connected to the control logic's BLU terminal.

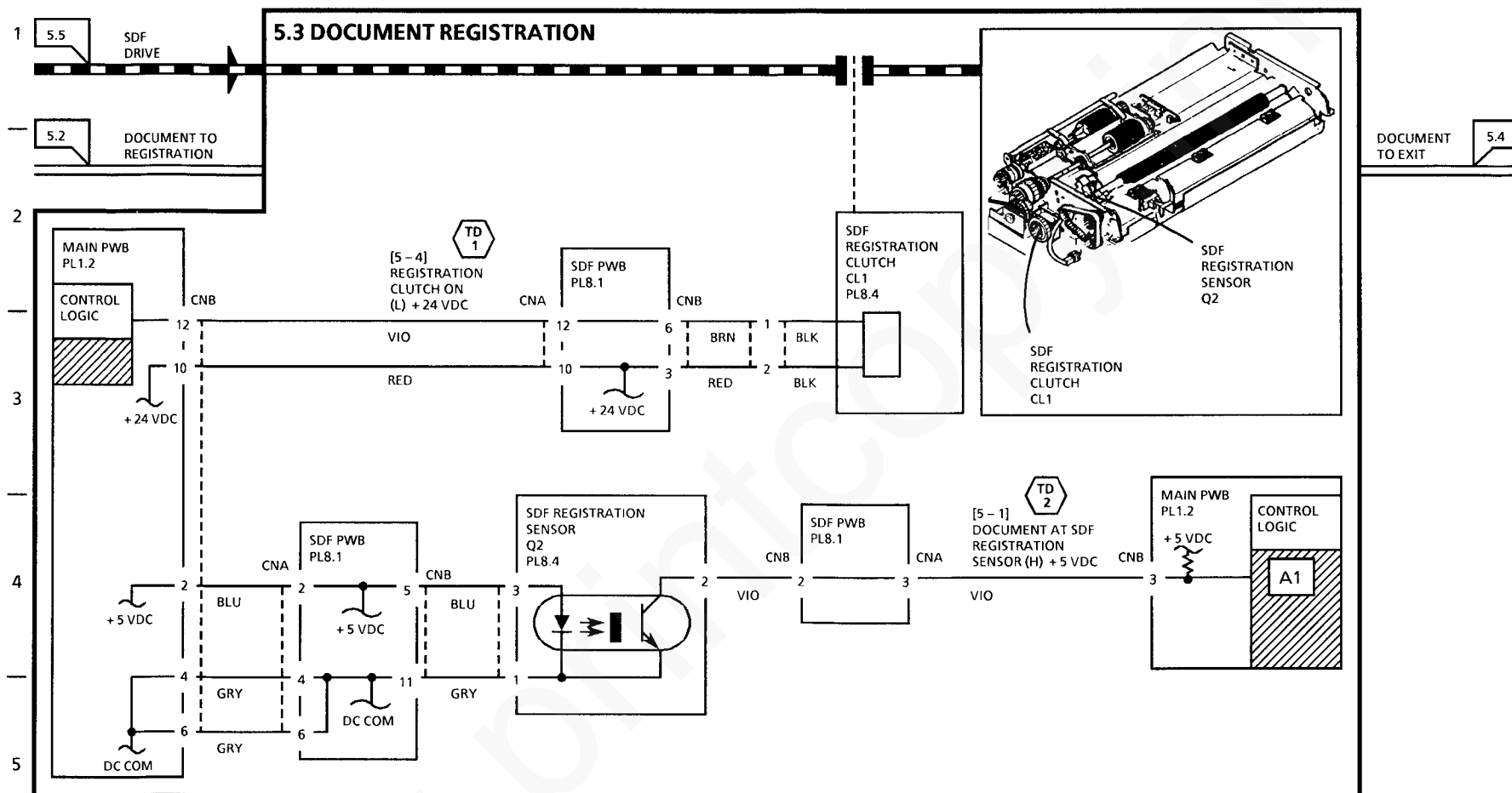
5.2 FEED AND SEPARATION

The diagram illustrates the electrical connections for the feed and separation system. It includes the following components and connections:

- MAIN PWB PL1.2**: Contains the **CONTROL LOGIC** and is connected to a **+24 VDC** source.
- CONTROL LOGIC**: Connected to the **MAIN PWB PL1.2** and the **SDF PWB PL8.1** via a **CNB** (Common Neutral Bus) and a **CNA** (Common Neutral Access) connection.
- SDF PWB PL8.1**: Contains the **SDF NUDGER SOLENOID SOL1 PL8.3** and is connected to a **+24 VDC** source.
- SDF NUDGER SOLENOID SOL1 PL8.3**: Connected to the **SDF PWB PL8.1** and the **SDF NUDGER SOLENOID SOL1** via a **CNB** connection.
- SDF NUDGER SOLENOID SOL1**: A physical component shown in a callout, connected to the **SDF NUDGER SOLENOID SOL1 PL8.3** via a **RED** (Red) connection.
- Document Present Sensor Q1**: A sensor connected to the **SDF NUDGER SOLENOID SOL1** via a **RED** connection.
- Document to Registration**: A sensor connected to the **SDF NUDGER SOLENOID SOL1** via a **RED** connection.

6	VOLTAGE	TEST POINT	BSD
	+ 5 VDC	JP 1	1.2
	+ 24 VDC	JP 3	1.2
	DC COM	JP 2	1.2



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INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
+ 24 VDC	JP 3	1.2
DC COM	JP 2	1.2

NOTES:

	+ 24 VDC HI + 1 VDC LOW
	+ 5 VDC HI 0 VDC LOW

[illegible]

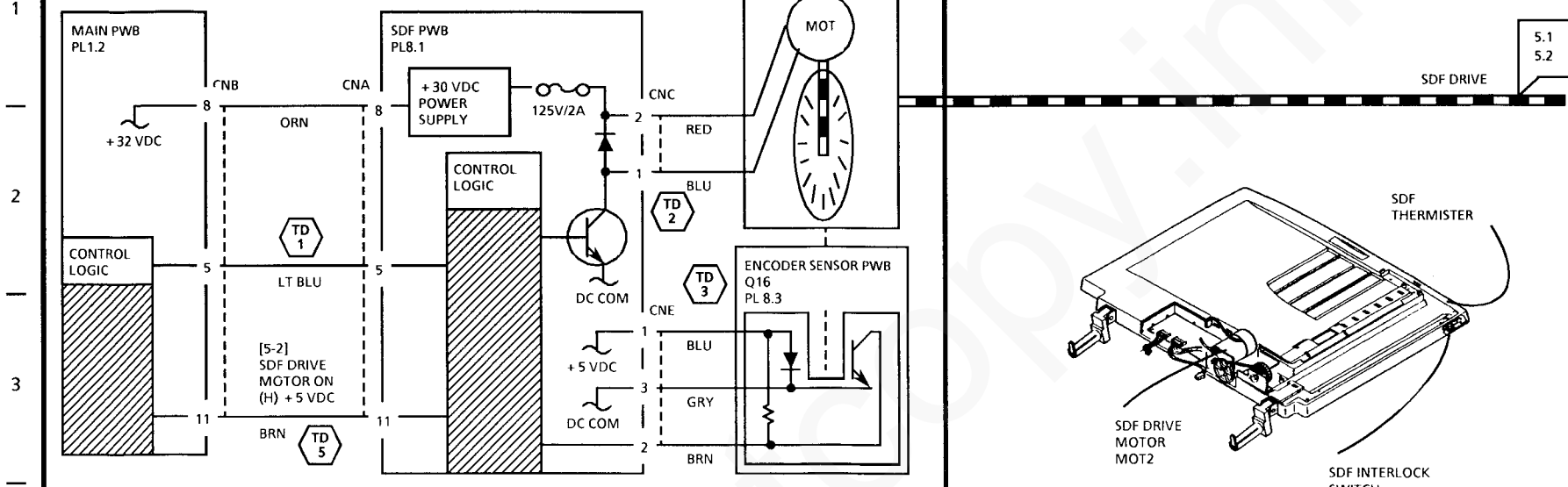
VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
DC COM	JP 2	1.2

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5.5 DOCUMENT DRIVE CONTROL

The schematic diagram illustrates the electrical connections for the Document Drive Control system. It includes the following components and connections:

- MAIN PWB PL1.2:** Provides a +32 VDC supply to the CONTROL LOGIC block.
- SDF PWB PL8.1:** Contains a +30 VDC POWER SUPPLY and a 125V/2A fuse. It also houses the CONTROL LOGIC block.
- SDF DRIVE MOTOR MOT2 PL8.3:** A motor with a thermal protector (MOT) and a thermistor (SDF THERMISTOR).
- ENCODER SENSOR PWB Q16 PL 8.3:** An encoder sensor with a thermistor (Q16).
- Wiring:** The diagram shows various wires connecting the components, including a +32 VDC line, a +30 VDC POWER SUPPLY, a 125V/2A fuse, and a 125V/2A line. It also shows connections for the SDF DRIVE MOTOR MOT2, the ENCODER SENSOR PWB Q16, and the SDF THERMISTOR.



5.6 SDF INTERLOCK

The diagram illustrates the SDF Interlock system. On the left, the **SDF INTERLOCK SWITCH S3 PL8.1** contains a **MAGNET** and is connected to terminals **12** (CNB) and **13** (PNK). Terminal **12** is connected to the **SDF PWB PL8.1** and the **MAIN PWB PL1.2**. The **SDF PWB PL8.1** also contains **CONTROL LOGIC** and is connected to terminals **10** (SDF EXIT SENSOR) and **8** (DOCUMENT PRESENT SENSOR). The **MAIN PWB PL1.2** contains **CONTROL LOGIC** and is connected to terminal **1** (CNB). A **BRN** wire connects terminal **1** of the SDF PWB to terminal **1** of the Main PWB. A **DC COM** terminal is connected to terminals **10** and **8** via resistors. A **+5 VDC** source is connected to terminal **1** of the Main PWB. A **TD 4** label is present near the Main PWB. A **[5-1] SDF CLOSED (H) +5 VDC 0.5 VDC TRANSITION** label is also present.

5.7 SDF OVERHEAT

The diagram illustrates the SDF Overheat protection circuit. It consists of the following components and connections:

- SDF DOCUMENT GLASS OVERHEAT THERMISTER (RT2, PL 8.2):** A thermister symbol connected to the SDF Interlock Switch.
- SDF INTERLOCK SWITCH (CNB):** A switch symbol connected to the SDF PWB and the MAIN PWB.
- SDF PWB (PL 8.1):** Contains a **CONTROL LOGIC** block (U7) connected to the SDF Interlock Switch and the MAIN PWB.
- MAIN PWB (PL 1.2):** Contains a **CONTROL LOGIC** block (U7) connected to the SDF PWB and the SDF Interlock Switch.
- Power Supply:** +5 VDC is connected to the circuit.

1 THE COPY SPEED SLOWS TO 6 CPM WHEN THE SDF IS OPEN

2 THE CIRCUITS FOR THESE SENSORS ARE SHOWN ON BSD'S 5.1 AND 5.4.

TD 1 + 5 VDC MOTOR OFF
+ 2.8 VDC MOTOR ON

TD 2 + 29 VDC MOTOR OFF
+ 21 VDC MOTOR ON

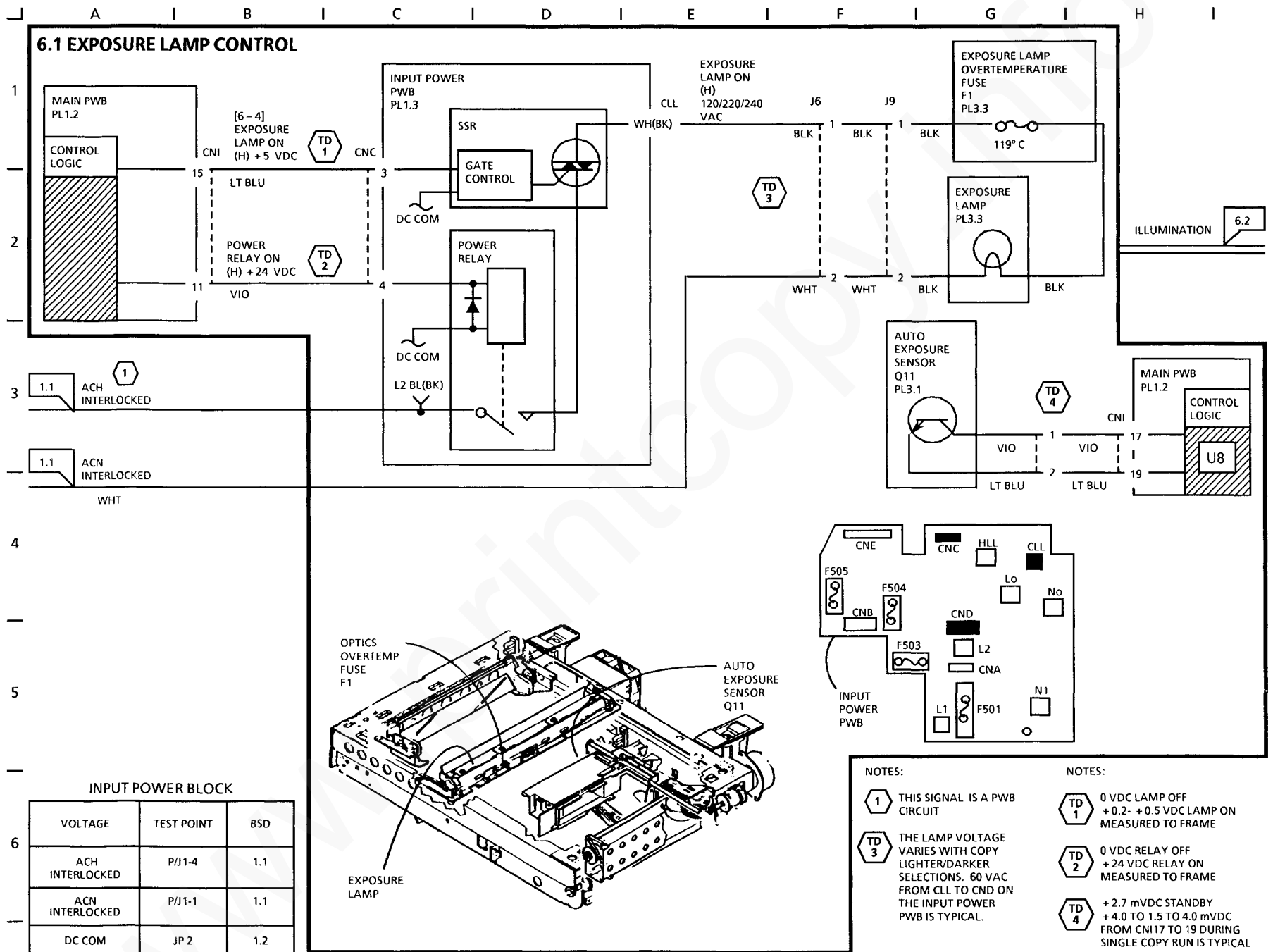
TD 3 CNE2
+ 0.1 OR + 5 VDC MOT OFF
+ 2.3 VDC MOTOR ON

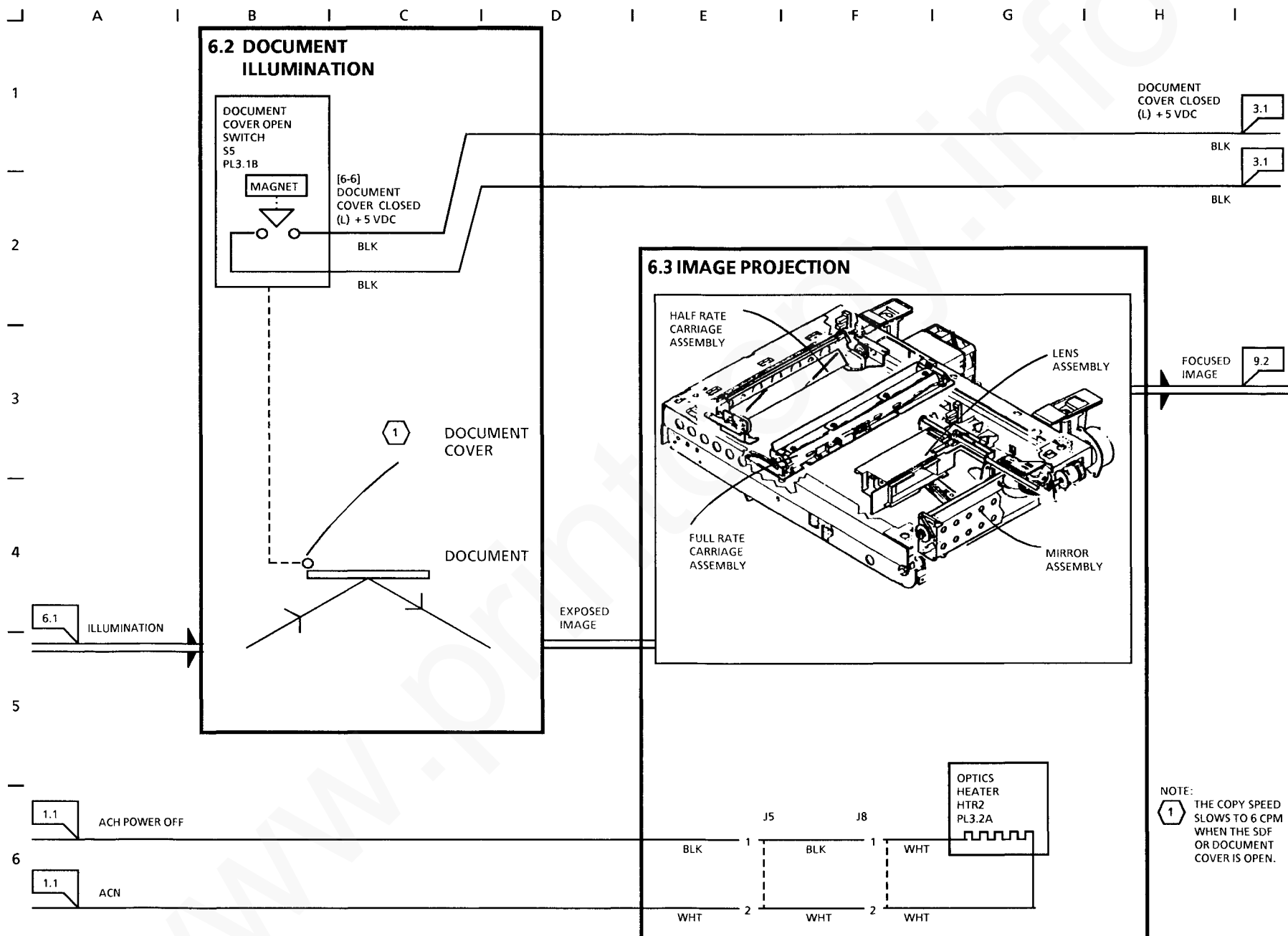
TD 4 + 4.3 VDC INTERLOCK CLOSED
+ 4.9 VDC INTERLOCK OPEN
WHEN NOTE 1 SENSORS ARE HI

TD 5 + 1 VDC LOW

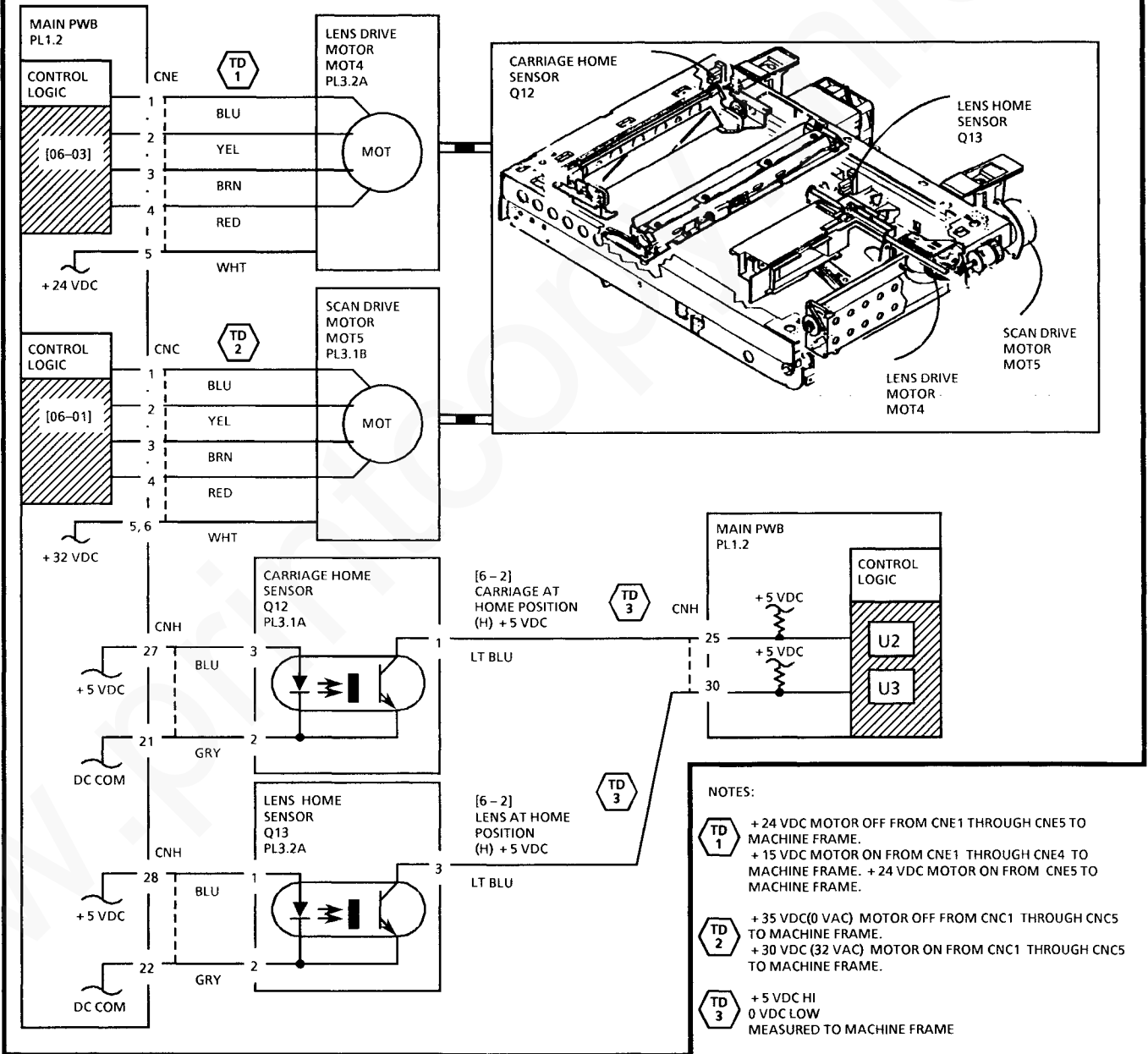
TD 6 PINS 1 AND 2 OF RT2
+ 4 VDC/1.7 KOHMS AT ROOM
TEMPERATURE
+ 2.6 VDC/1 KOHMS WITH U7
DISPLAYED

VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
+ 32 VDC	JP 47	1.2
DC COM	JP 2	1.2

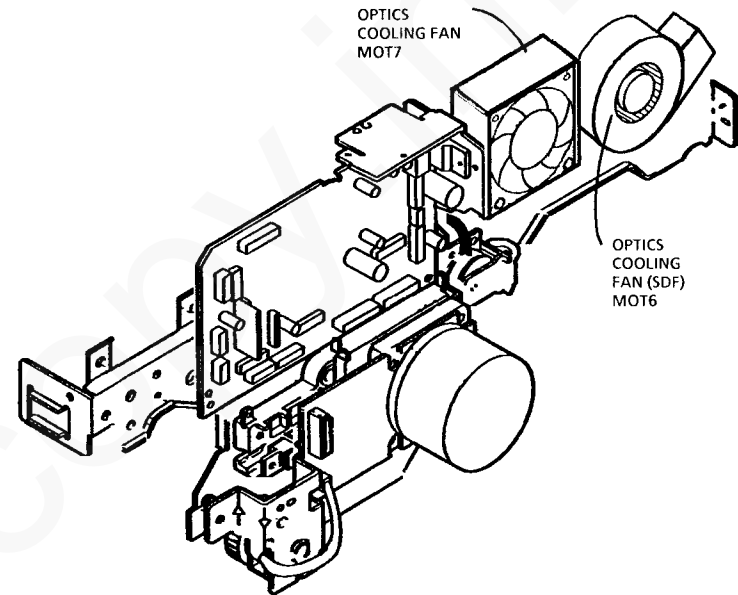
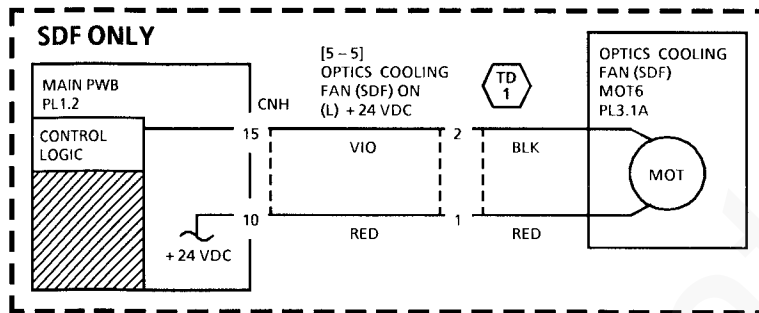
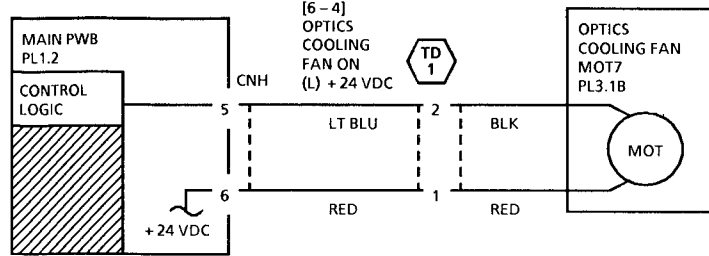




6.4 OPTICS POSITIONING



6.5 OPTICS COOLING



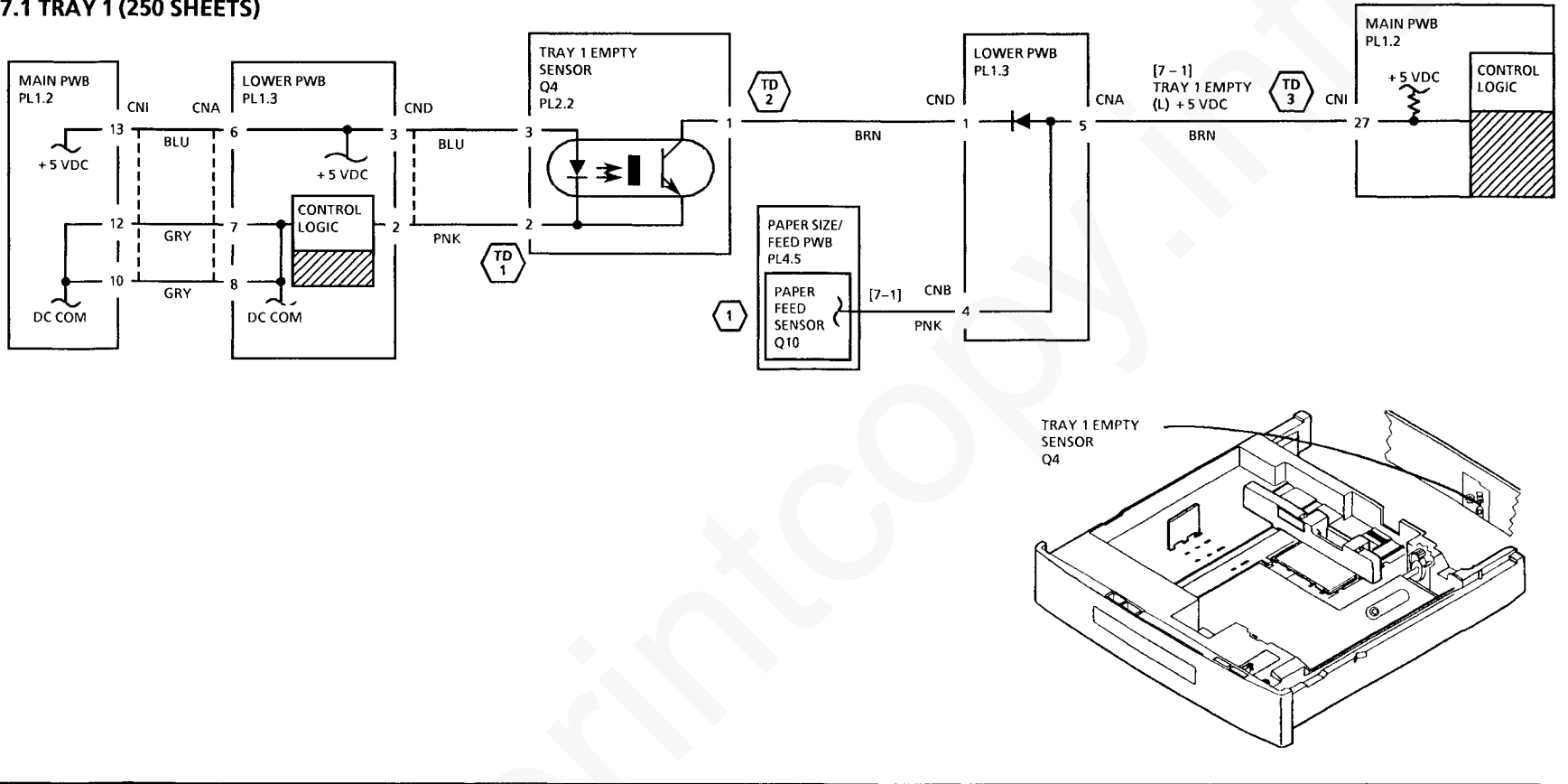
INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 24 VDC	JP 3	1.2

NOTES:

TD 1 + 0.8 VDC LOW
+ 24 VDC HI
MEASURED TO FRAME

7.1 TRAY 1 (250 SHEETS)



INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
DC COM	JP 2	1.2

NOTES:

VOLTAGES ARE MEASURED TO MACHINE FRAME

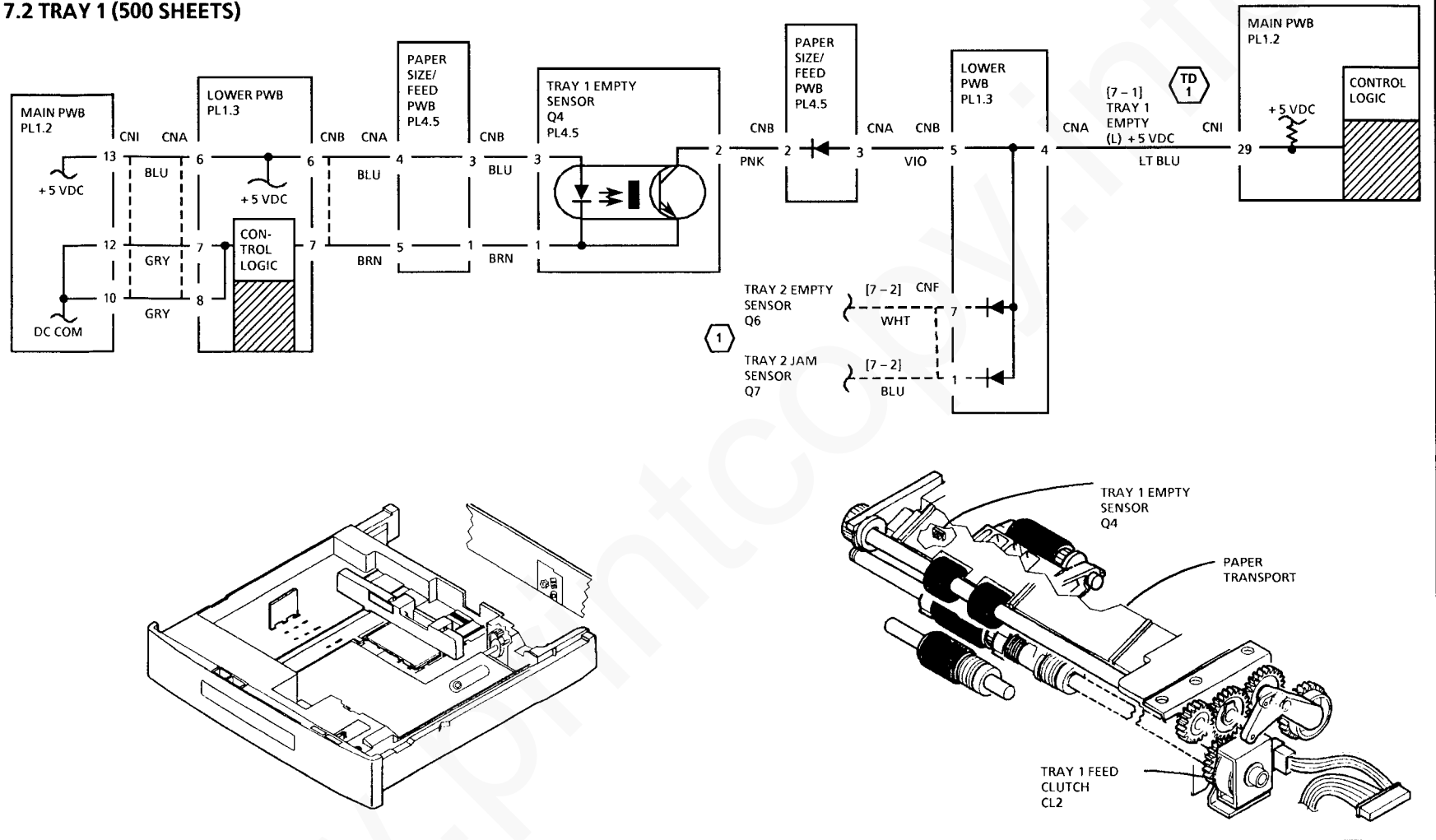
1 THE COMPLETE SENSOR CIRCUIT IS SHOWN ON BSD 8.3

TD 1 +0.2 VDC LOW
+1.2 VDC HI

TD 2 +4.1 VDC LOW
+4.7 VDC HI

TD 3 +4.4 VDC LOW
+5 VDC HI

7.2 TRAY 1 (500 SHEETS)



INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
DC COM	JP 2	1.2

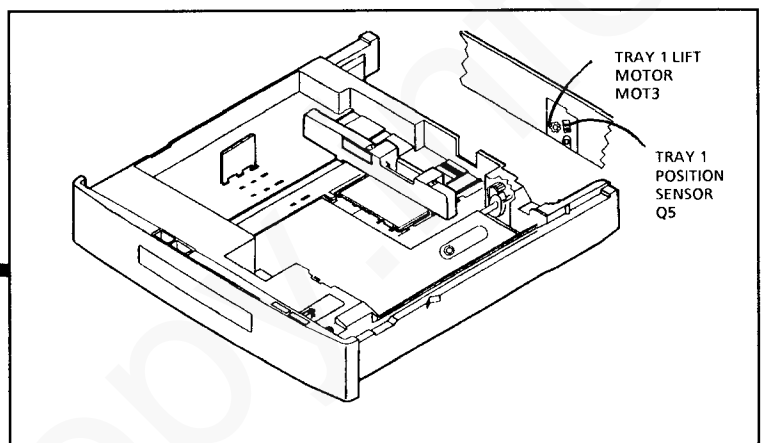
NOTE:

VOLTAGES ARE MEASURED TO MACHINE FRAME

1 DASHED LINES WITH TRAY 2 OPTION. THE COMPLETE SENSOR CIRCUITS ARE SHOWN ON BSD'S 7.5 AND 7.6

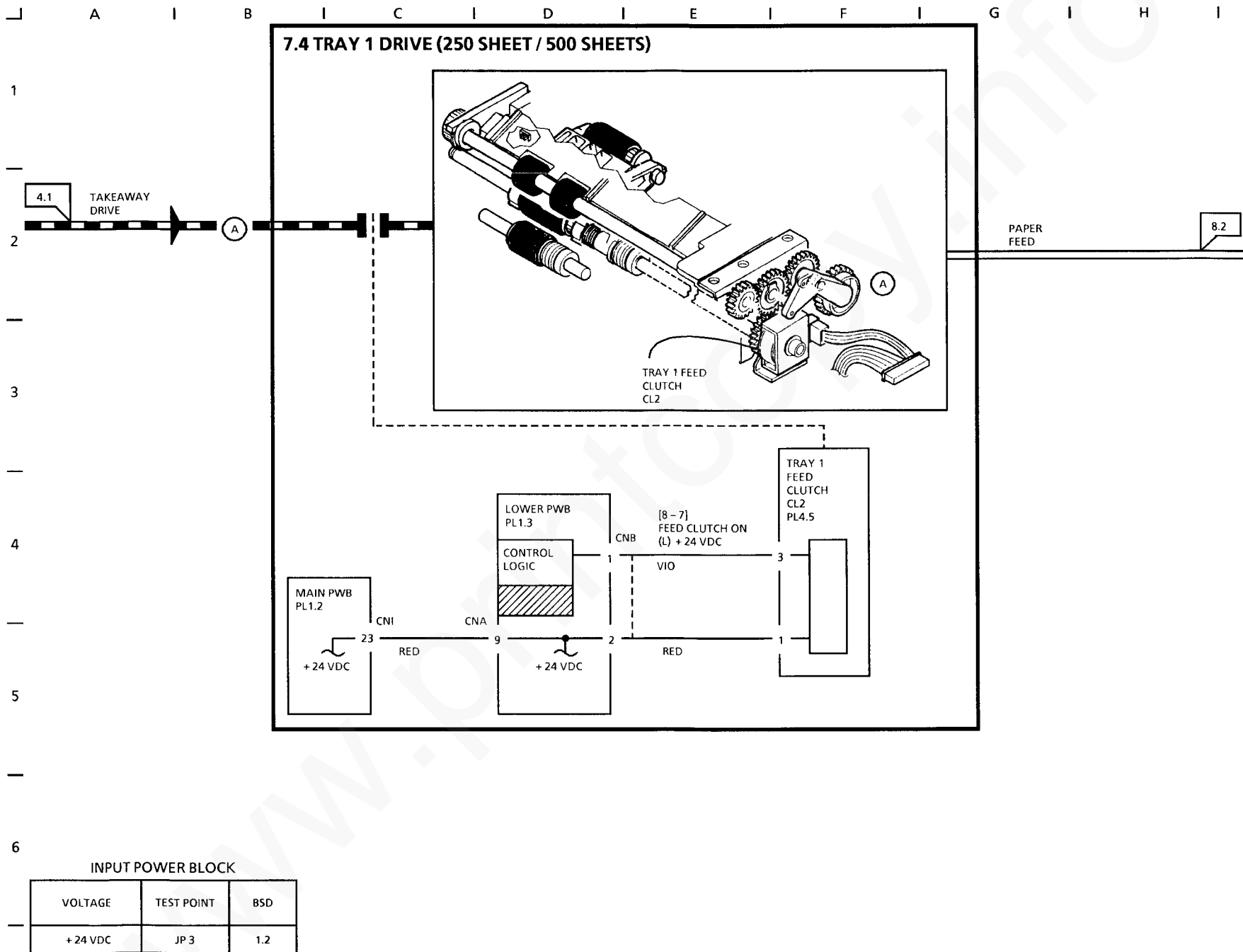
TD 1 + 4.4 VDC LOW
+ 4.9 VDC HI

- 1
- 2
- 3
- 4
- 5

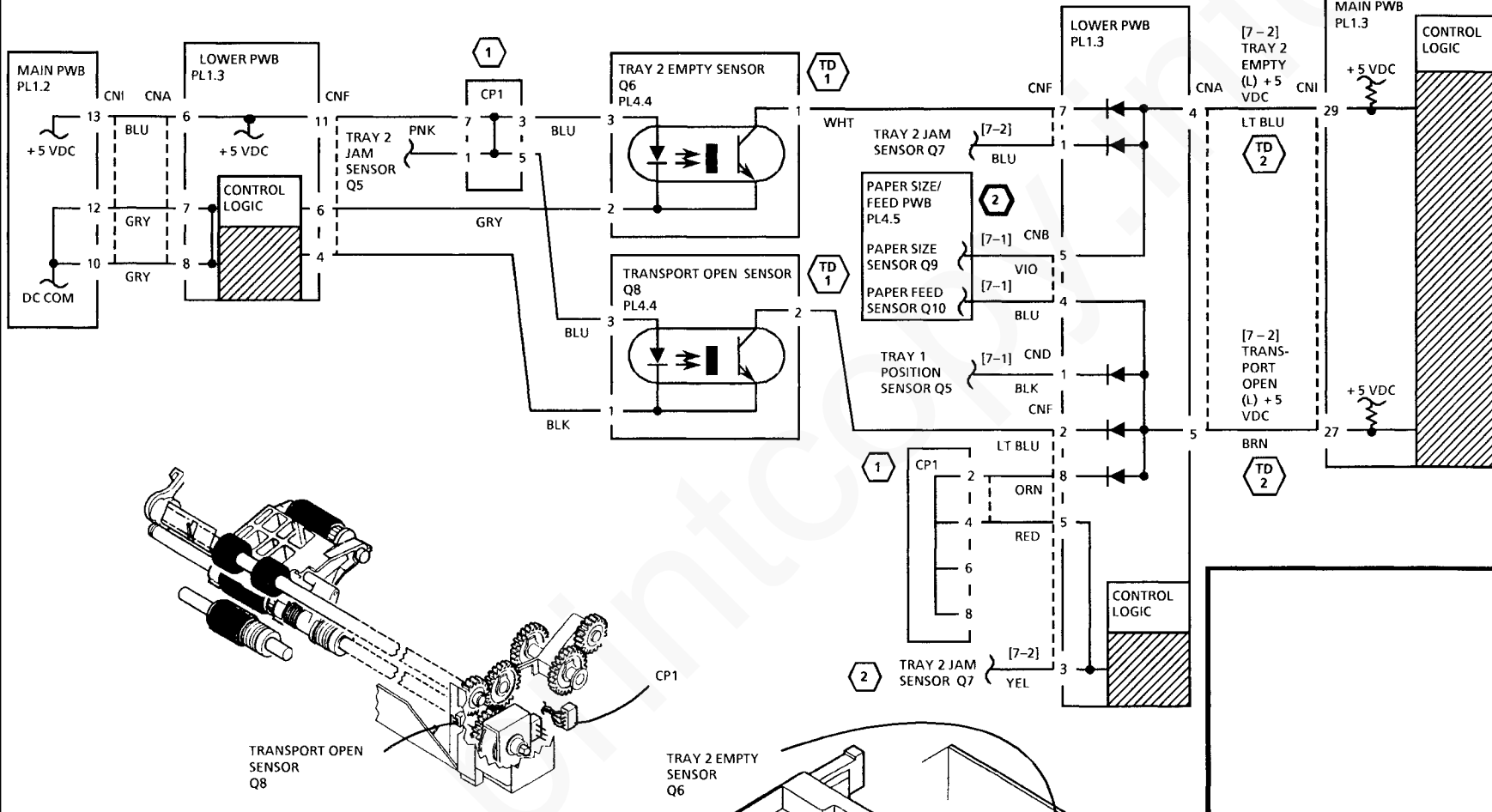
6

VOLTAGES ARE MEASURED TO MACHINE FRAME

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7.5 TRAY 2



INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
DC COM	JP 2	1.2

NOTES:

VOLTAGES ARE MEASURED TO MACHINE FRAME.

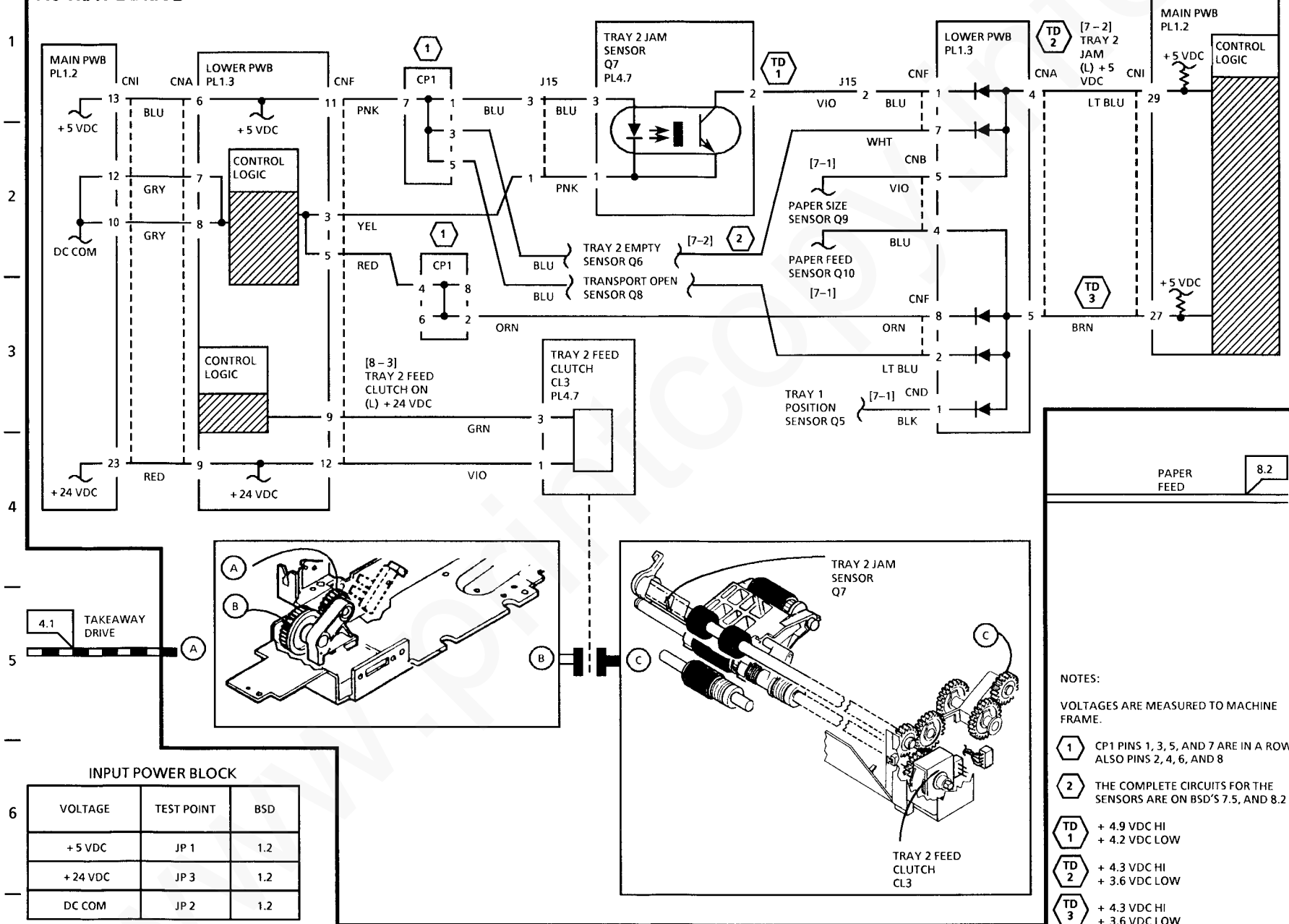
1 CP1 PINS 1, 3, 5, AND 7 ARE IN A ROW. ALSO PINS 2, 4, 6, AND 8

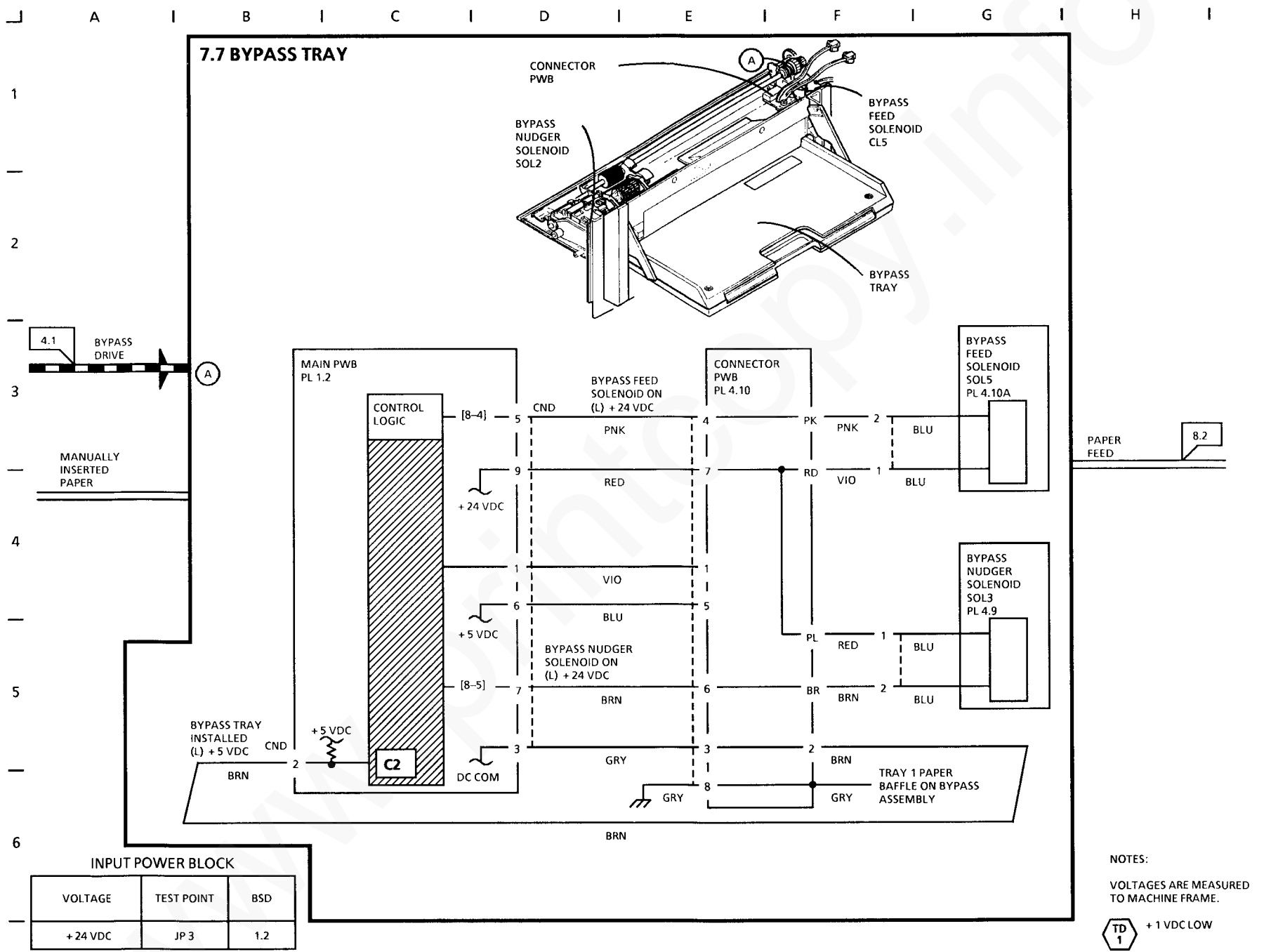
2 THE COMPLETE CIRCUITS FOR THE SENSORS CAN BE FOUND ON BSD'S 7.3, 7.6, AND 8.2.

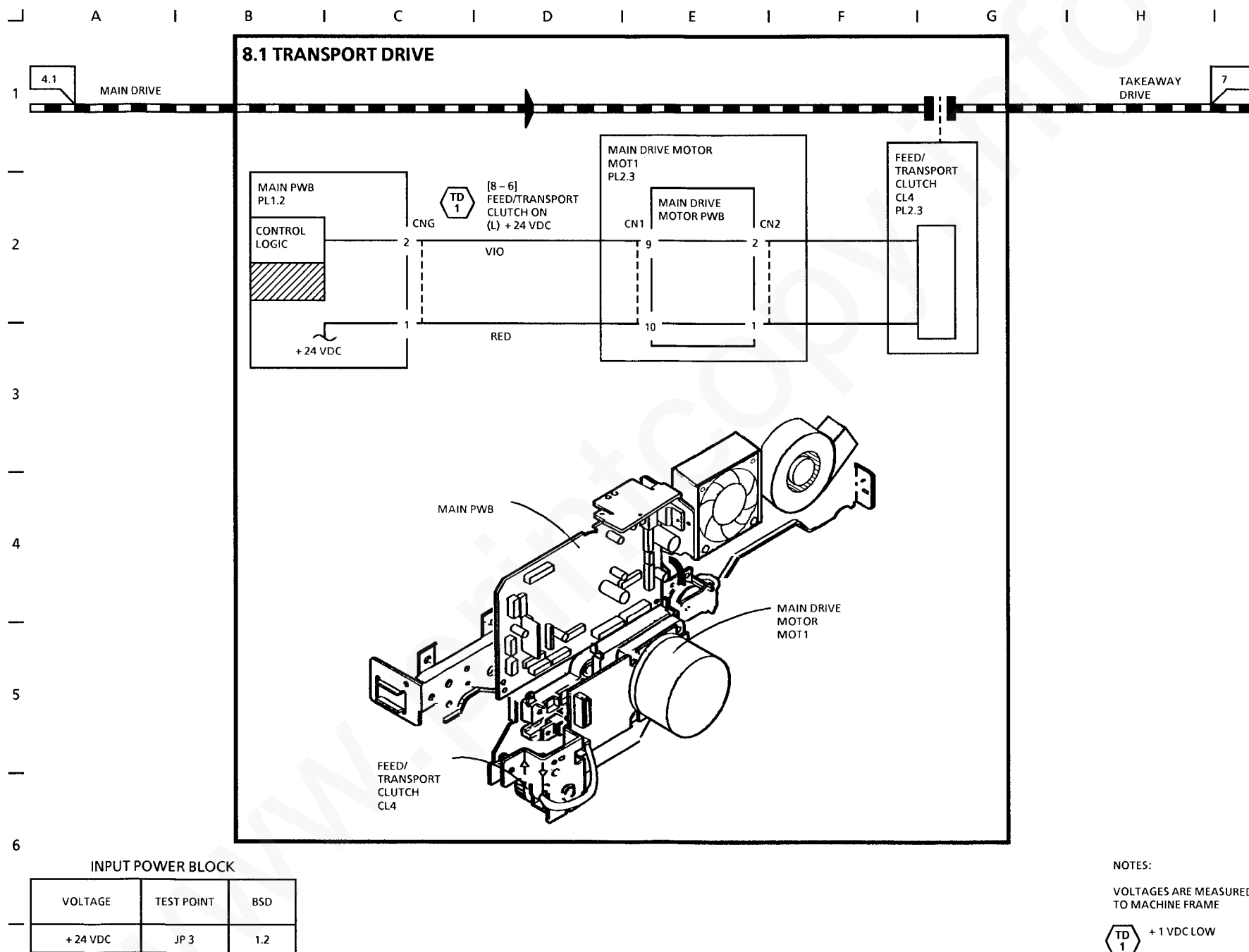
TD 1 + 4.6 VDC HI
+ 3.9 VDC LOW

TD 2 + 4.3 VDC HI
+ 3.6 VDC LOW

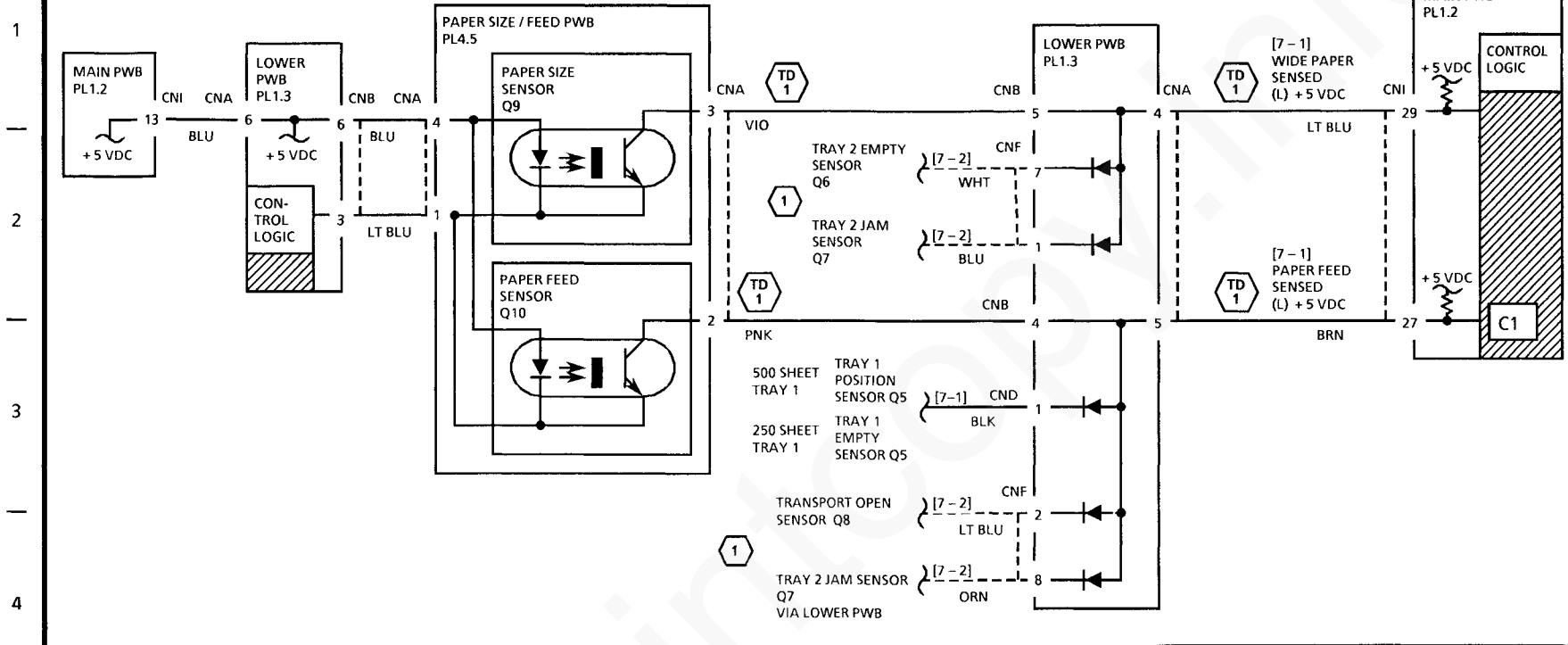
7.6 TRAY 2 DRIVE







8.2 PAPER FEED AND TRANSPORTATION

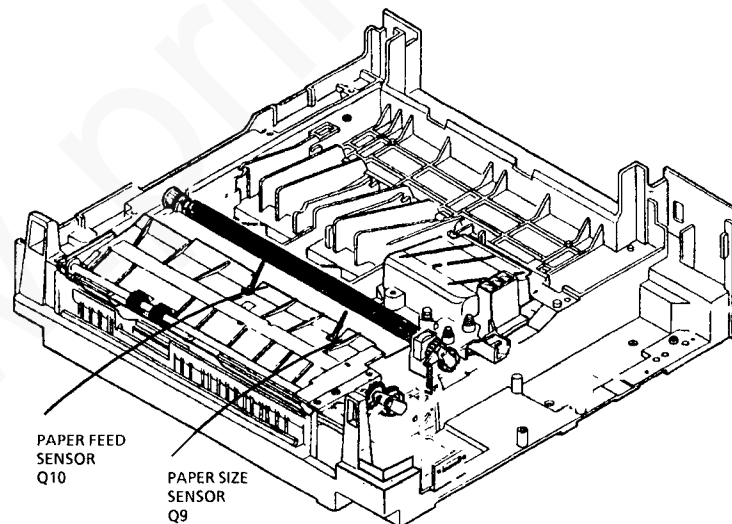


7.3
7.5
7.7
7.8

PAPER FEED

INPUT POWER BLOCK

VOLTAGE	TEST POINT	G. F.
+ 5 VDC	JP 1	1.2
DC COM	JP 2	1.2



PAPER TO
REGISTRATION

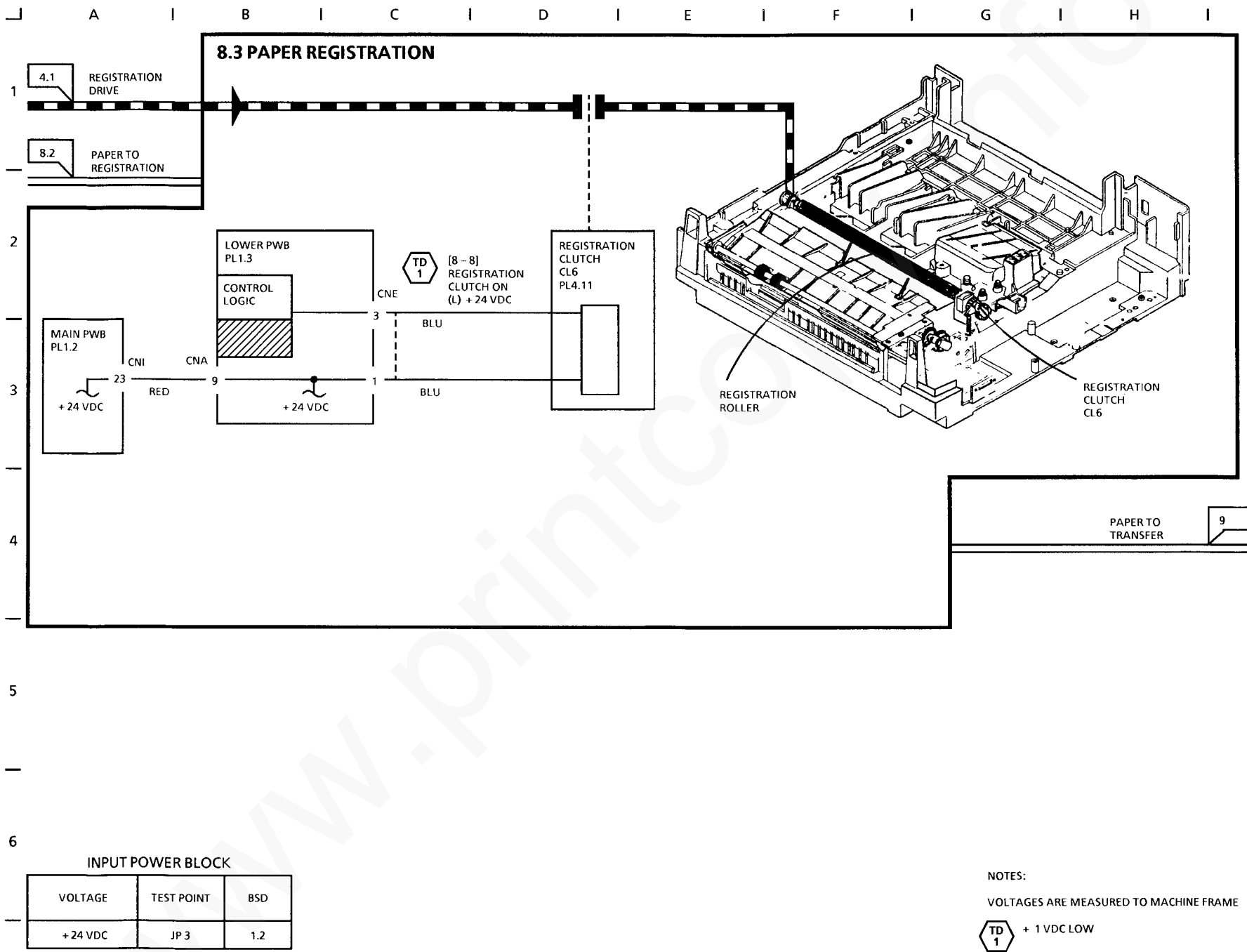
8.3

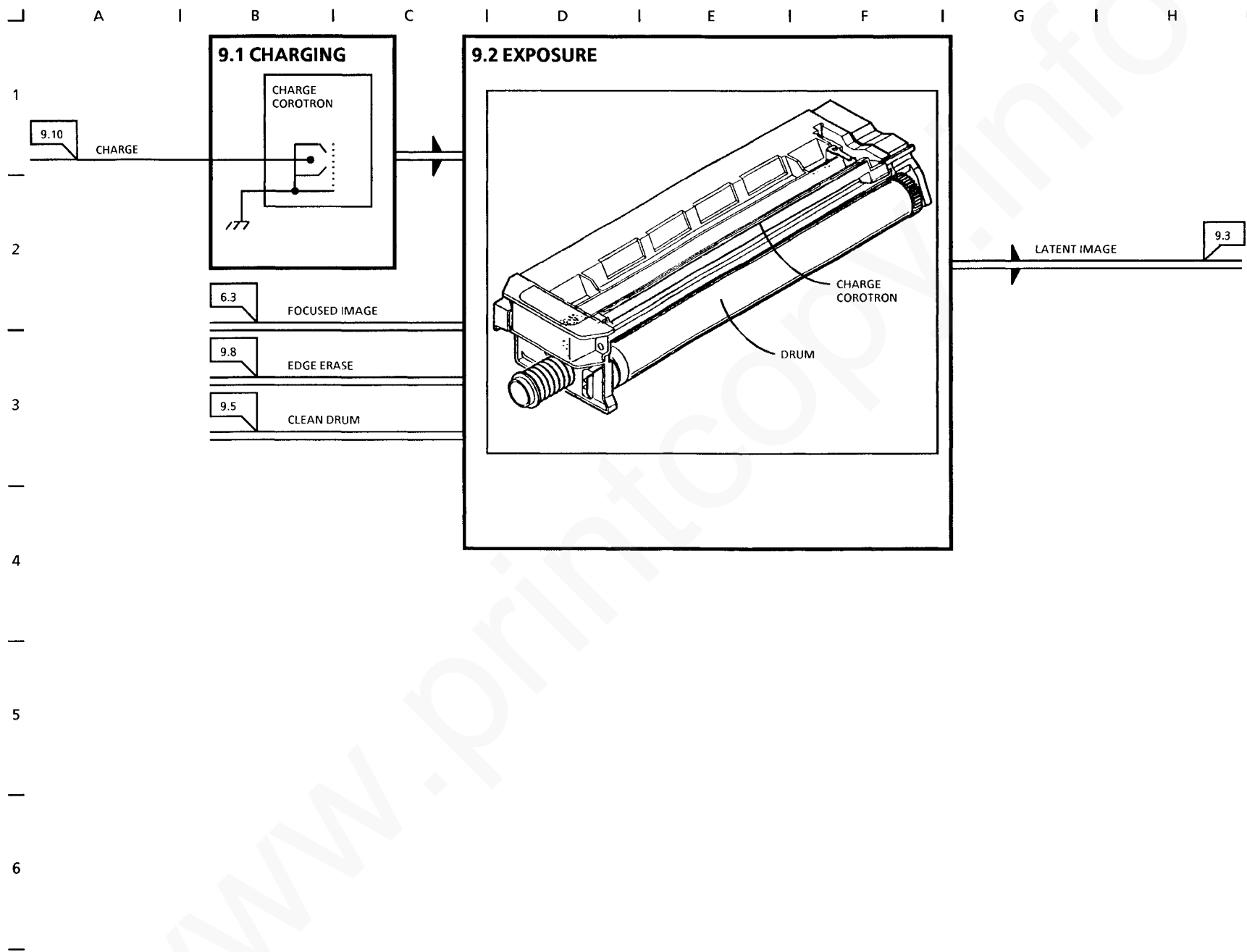
NOTES:

VOLTAGES ARE MEASURED TO MACHINE FRAME

1 DASHED LINES WITH TRAY 2 OPTION (500 SHEET TRAY 1 ONLY). THE COMPLETE CIRCUITS FOR THE SENSORS ARE ON BSD'S 7.5, AND 8.2

TD 1 + 4.9 VDC HI
+ 3.4 VDC LOW



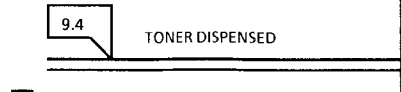


9.3 DEVELOPMENT

1



2



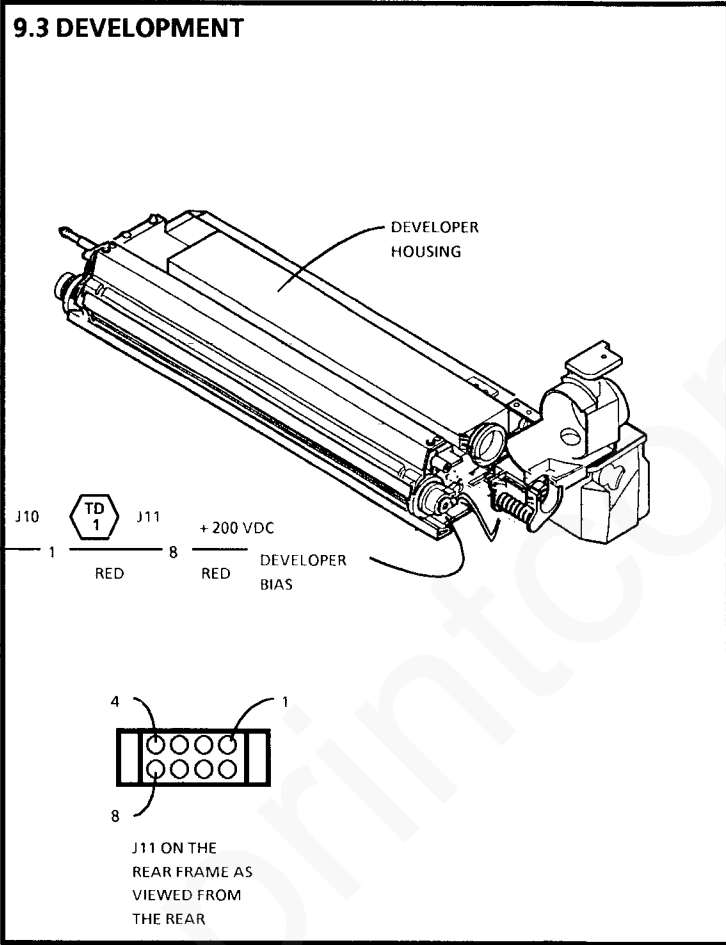
3



4

5

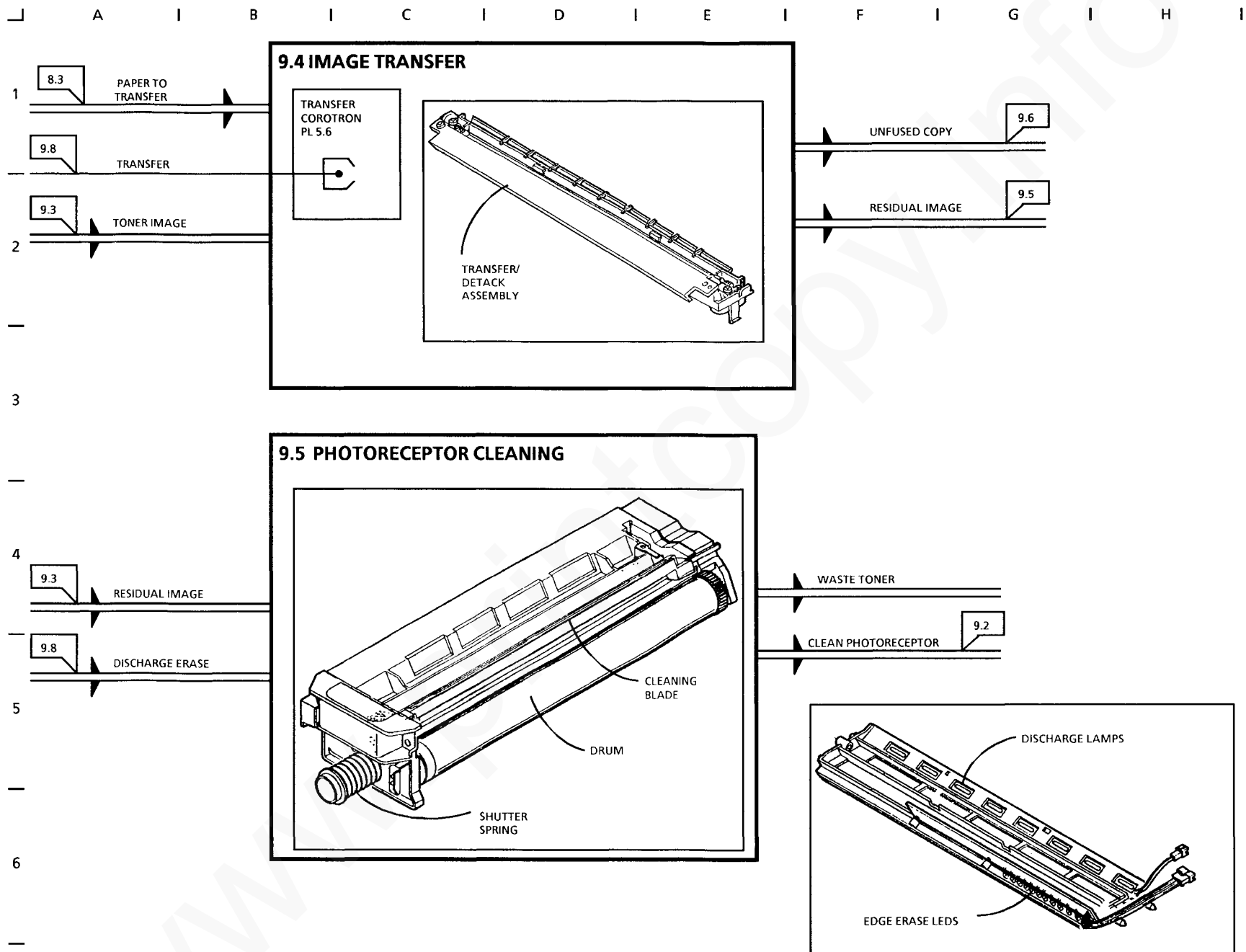
6

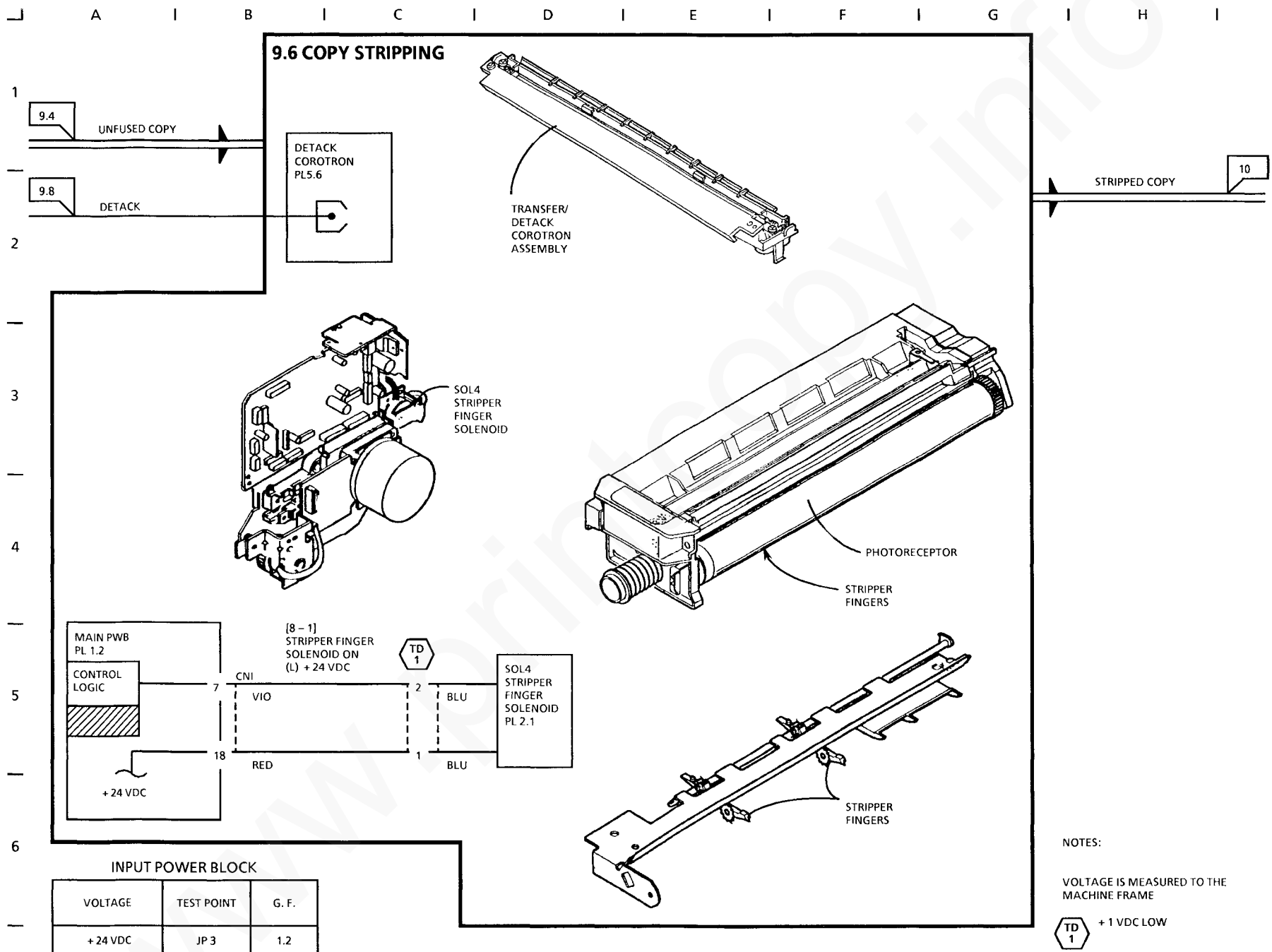


NOTE:

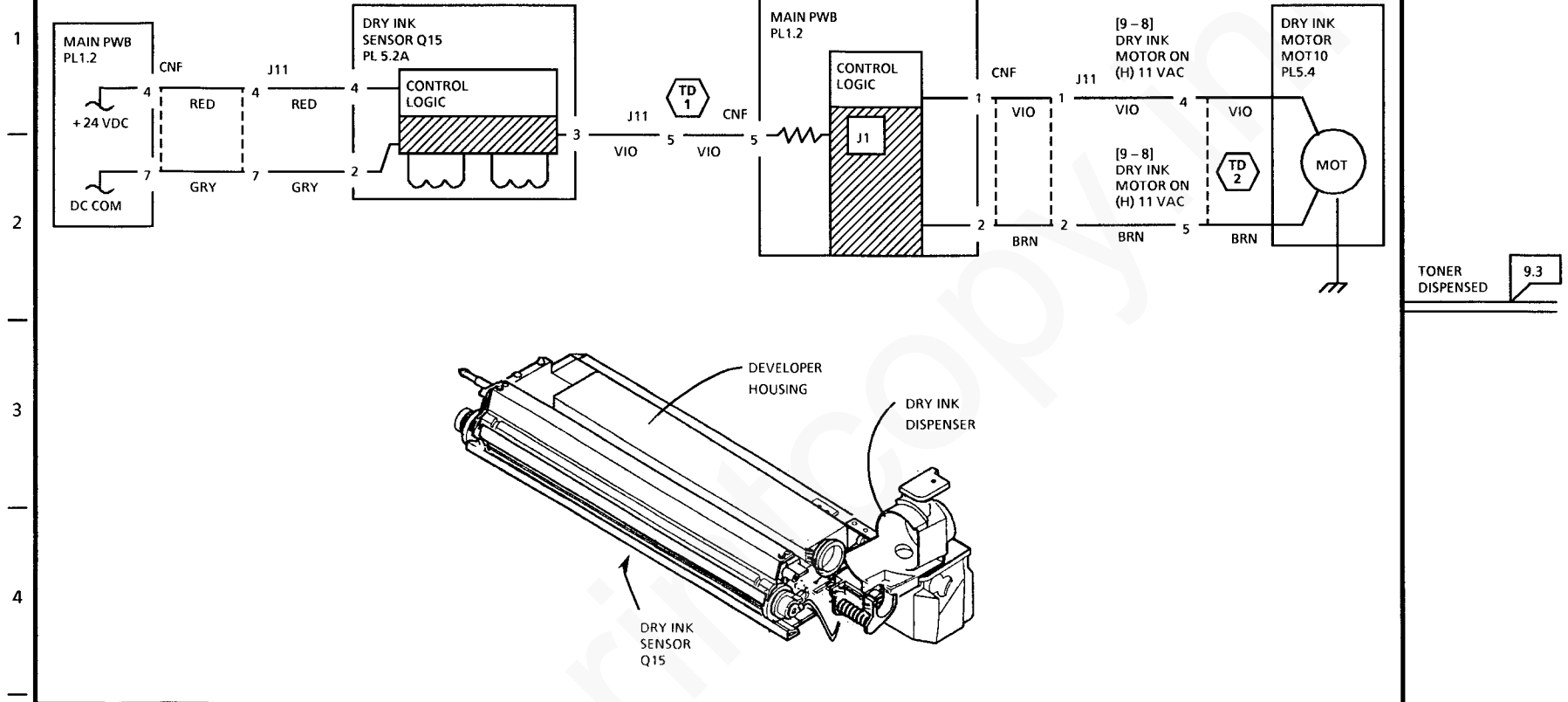


VOLTAGE IS MEASURED TO THE MACHINE FRAME





9.7 DRY INK DISPENSING



INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 24 VDC	JP 3	1.2

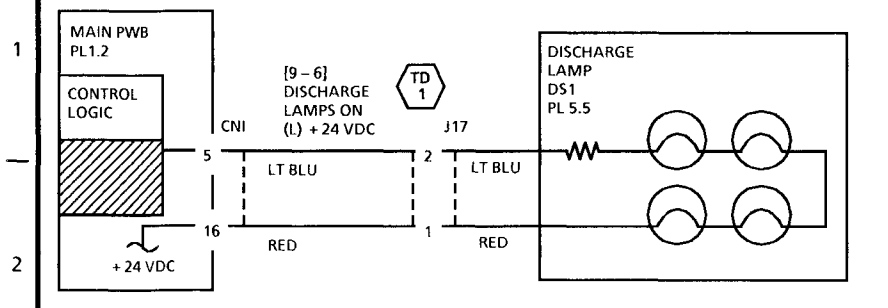
NOTES:

VOLTAGES ARE MEASURED TO MACHINE FRAME

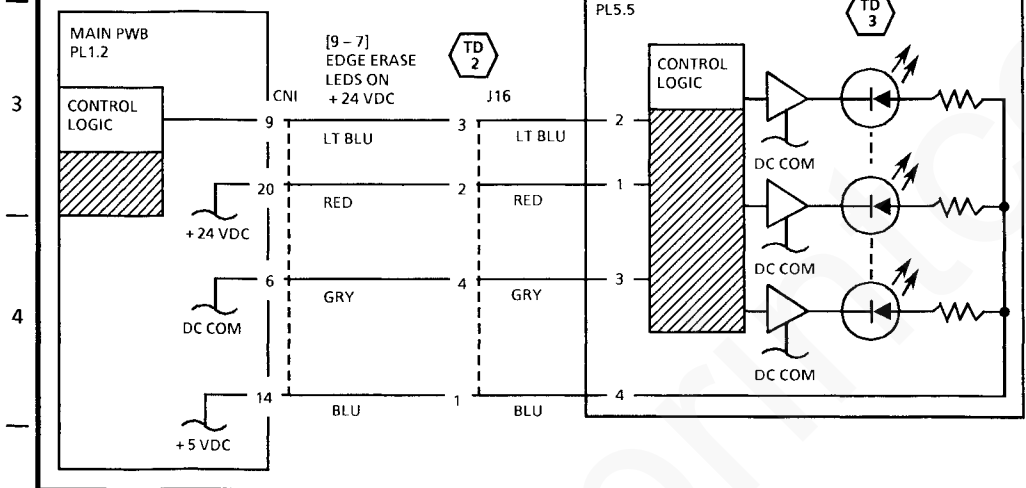
TD 1 THE FOLLOWING VOLTAGES ARE TYPICAL
 + 1.7 VDC STANDBY MODE SDF / RE
 + 2.6 VDC STANDBY MODE RETAIL 1:1
 + 1.4 VDC RUN MODE SDF / RE
 + 2.3 VDC RUN MODE RETAIL 1:1

TD 2 11 VAC MOTOR ON
 0 VAC MOTOR OFF

9.8 DISCHARGE ERASE

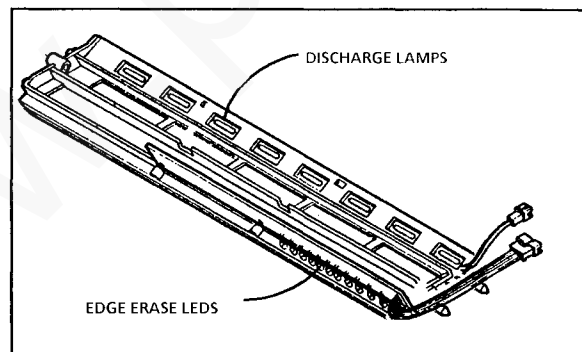


9.9 EDGE ERASE



INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+5 VDC	JP 1	1.2
+24 VDC	JP 3	1.2
DC COM	JP 2	1.2



NOTES:

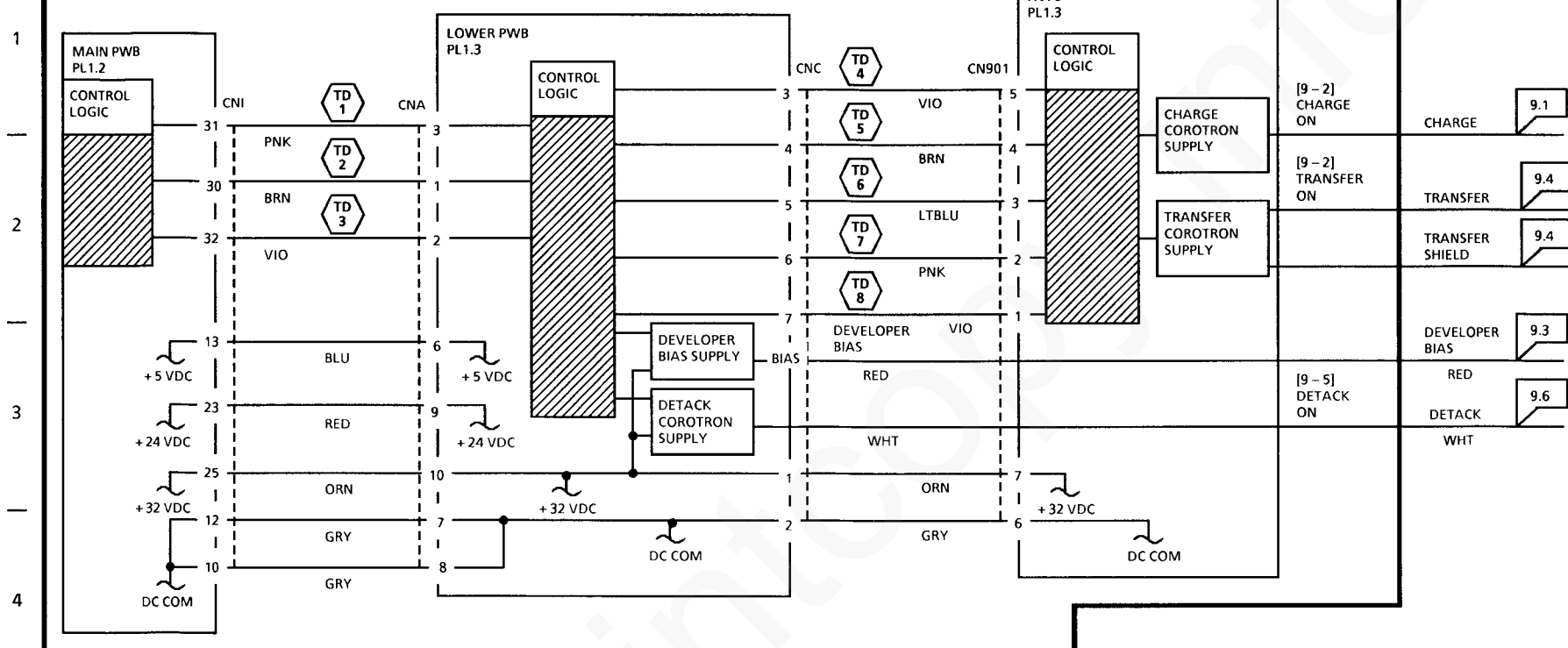
VOLTAGES ARE MEASURED TO MACHINE FRAME.

TD 1 +1 VDC LOW

TD 2 VOLTAGE GOES FROM +24 VDC TO +1.8 VDC IN TEN STEPS AS THE EDGE ERASE LEDS ARE ILLUMINATED. WHILE RUNNING [9 - 7], A TYPICAL MEASUREMENT WILL INDICATE THE VOLTAGE GOES FROM +24 VDC TO 21.8 TO 19.6 TO 13.3 TO 15 TO 12.9 TO 10.7 TO 8.5 TO 6.2 TO 4 TO 1.8 VDC.

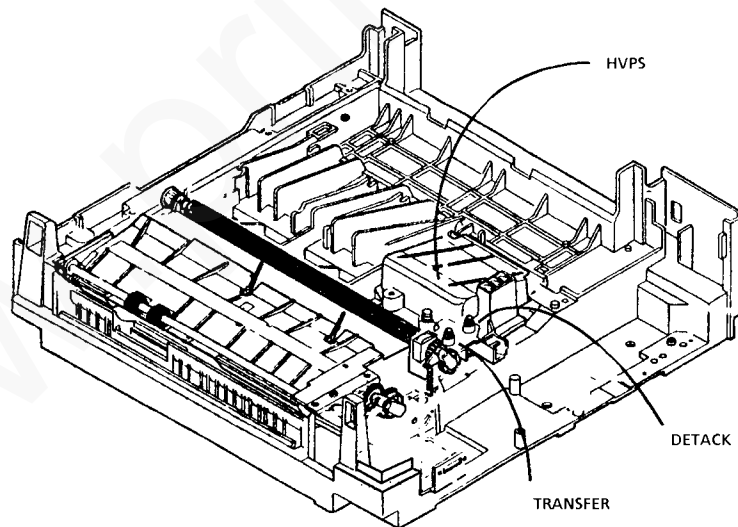
TD 3 R/E COPIERS, 12 LEDS
1:1 COPIERS, 5 LEDS

9.10 COROTRON AND DEVELOPER BIAS POWER



INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+ 5 VDC	JP 1	1.2
+ 24 VDC	JP 3	1.2
+ 32 VDC	JP 47	1.2
DC COM	JP 2	1.2



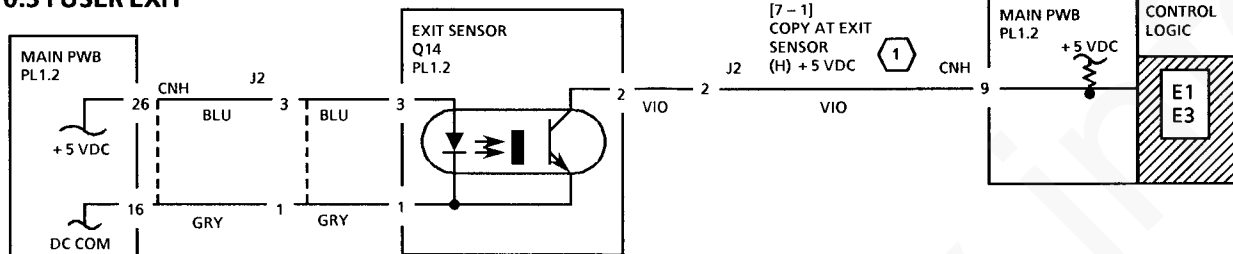
NOTES:
IN DIAGNOSTICS MODE
VOLTAGES ARE POSITIVE AND
MEASURED TO MACHINE FRAME

STANDBY 9-2 9-5

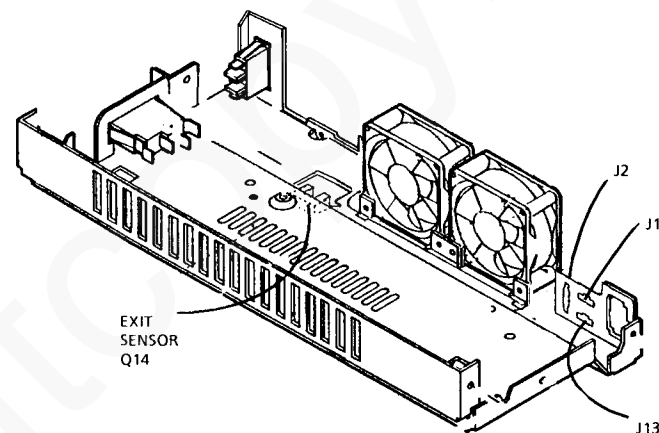
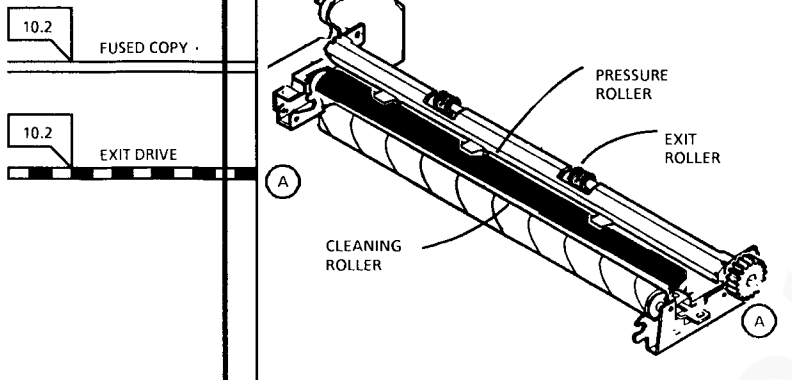
TD 1	4.8	3.8	4.5
TD 2	0.12	0.31	1.6
TD 3	4.3	3.6	4.1
TD 4	27.8	0.8	
TD 5	6.5	3.4	
TD 6	6.6	0.7	
TD 7	6.6	0.7	
TD 8	6.6	0.7	

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10.3 FUSER EXIT



COPY TO EXIT TRAY



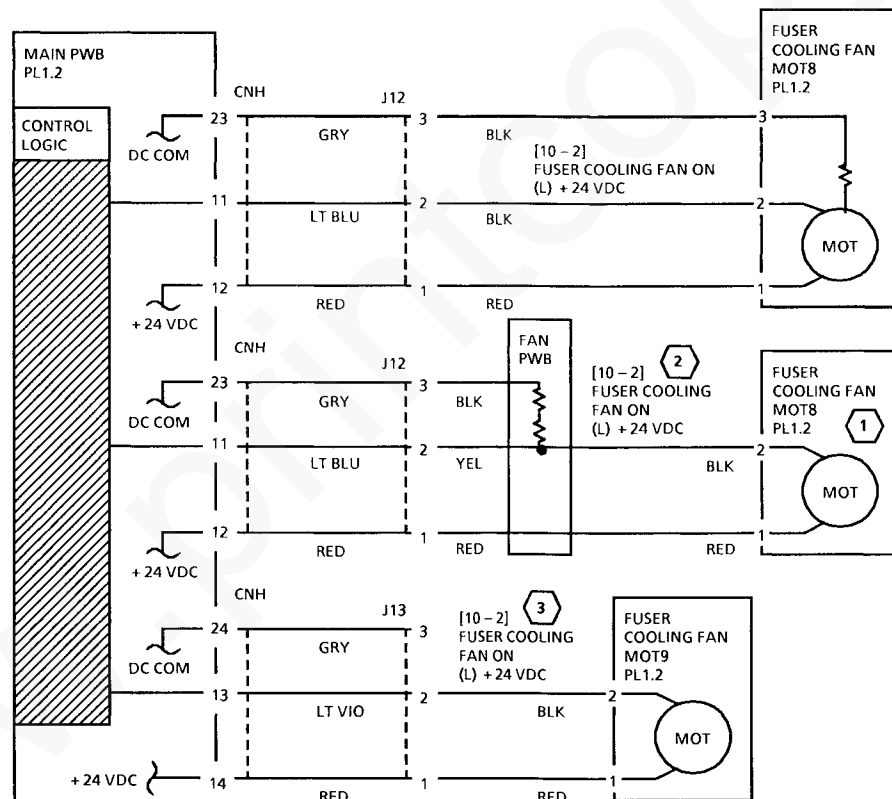
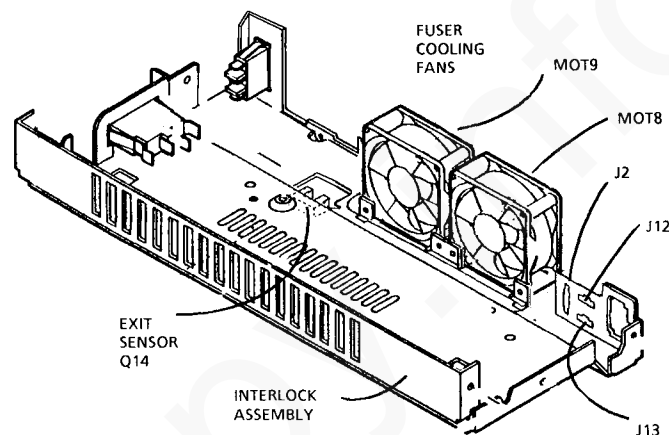
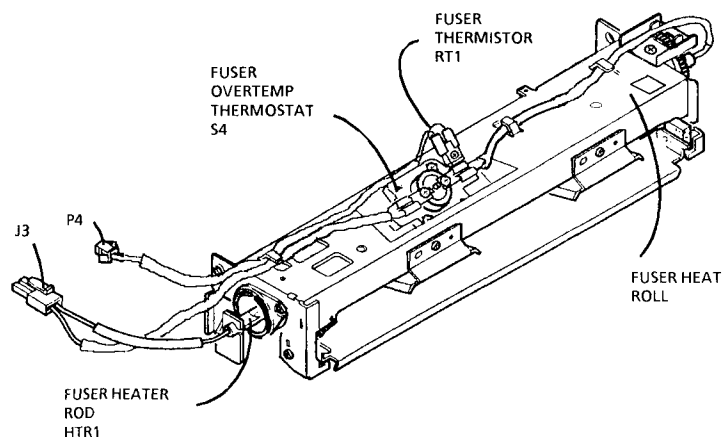
NOTES:

1 +5 VDC HI
0 VDC LOW

INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+5 VDC	JP 1	1.2
DC COM	JP 2	1.2

10.4 FUSER COOLING



NOTES:

- 1 FUSER COOLING FAN MOT8 OPERATES AT SLOW SPEED, VIA THE FAN PWB, WHEN THE COPIER POWER IS SWITCHED ON.
- 2 +12 VDC HI MOT8 ON SLOW
+1 VDC LOW MOT8 ON FAST
- 3 +24 VDC HI
+1 VDC LOW

INPUT POWER BLOCK

VOLTAGE	TEST POINT	BSD
+24 VDC	JP 3	1.2
DC COM	JP 2	1.2